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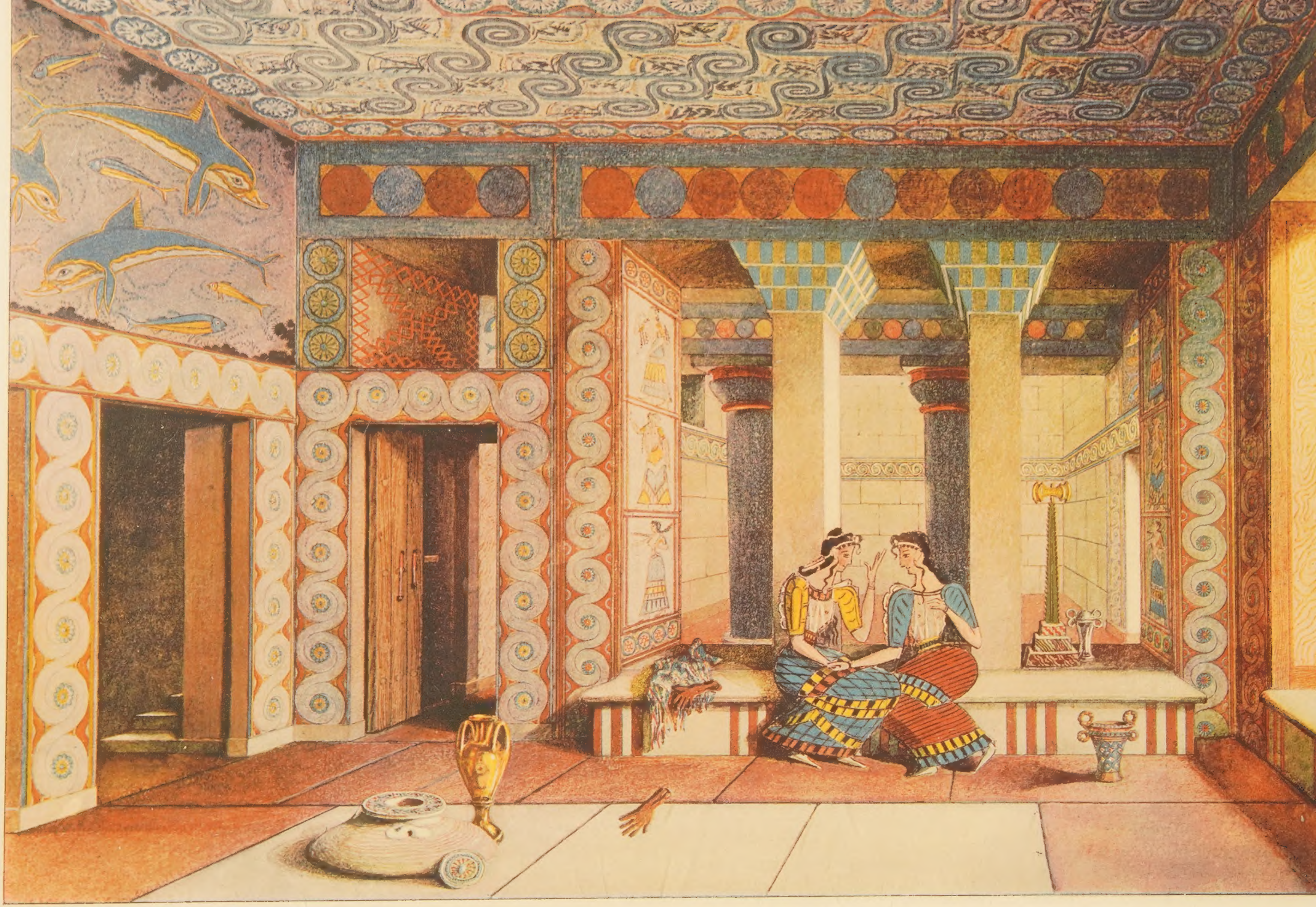
THE PALACE OF MINOS

AT KNOSSOS



RESTORED VIEW OF 'QUEEN'S MEGARON' WITH DOORWAY LEADING TO EAST SECTION AND LIGHT-WELL BEYOND.
TO RIGHT, WINDOW OPENING ON SOUTHERN LIGHT-AREA: TO LEFT, PRIVATE STAIRCASE TO UPPER 'THALAMOS'

THE
PALACE OF MINOS

A COMPARATIVE ACCOUNT OF THE SUCCESSIVE
STAGES OF THE EARLY CRETAN CIVILIZATION
AS ILLUSTRATED BY THE DISCOVERIES

AT KNOSSOS

By SIR ARTHUR EVANS

D.LITT., ETC., F.R.S., F.B.A., ROYAL GOLD MEDALLIST, R.I.B.A.

FOREIGN MEMBER OF THE R. ACAD. DEI LINCEI, [illegible]
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AND AMERICAN ARCH. INSTS. [illegible]

HONORARY KEEPER AND VISITOR OF THE ASHMOLEAN MUSEUM
IN THE UNIVERSITY OF OXFORD, HON. FELLOW
OF BRASENOSE COLLEGE

VOLUME III

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AND EASTERN SECTIONS OF THE PALACE: THE MOST
BRILLIANT RECORDS OF MINOAN ART AND THE
EVIDENCES OF AN ADVANCED RELIGION

WITH 367 FIGURES IN THE TEXT, PLATES,
13 COLOURED AND 11 SUPPLEMENTARY PLATES,
(SECTION OF THE 'GRAND STAIRCASE' AND
PLANS AND PERSPECTIVE DRAWING OF THE
'DOMESTIC QUARTER' IN POCKET AT THE END
OF THE VOLUME)

MACMILLAN AND CO., LIMITED
ST. MARTIN'S STREET, LONDON

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PREFACE

In the Second Volume of this work, issued in two parts, a good deal of space was reserved for a survey of the neighbouring town houses and dependencies of the Palace. It was also thought desirable to take a more general survey of Knossos in its geographical relations, its position with regard to Aegean traffic, and the record of some remarkable evidences of a line of ancient road connexion across the Island to a port on the Libyan Sea. The Third Volume, now completed, is, like the First, more exclusively connected with the Palace itself. The account of the building follows on that included in the latter half of Vol. II, Part II, relating to the great Restoration of the West Wing of the building after the destructive earthquake that took place towards the close of M. M. III.

The earlier and later history of the great Transitional Age, which embraces the whole of the Third Middle Minoan Period, is here methodically explored throughout the remaining Palace regions, beginning with the North-Western and Northern Entrance systems and working round by the Eastern slope, past the great Bastion—remarkable details of which have been now for the first time recovered—to the 'Domestic Quarter' beyond.

The artistic remains with which we are confronted in following out this circuit are in many respects pre-eminent amongst all such relics brought to light on the Palace site. The 'Miniature Frescoes'—here illustrated by a series of Coloured Plates—that seem to stand in connexion with a small shrine of the North-West Palace section—with their vivid conversational sketches of Court ladies, are unique in Ancient Art. Fragmentary remains in the same 'Miniature' style and some closely related small reliefs lead us on the other hand to the siege scene—here regarded as a historic record—on the silver 'rhyton' from Mycenae, of which the original form is given for the first time.

So, too, a microscopic design of a coursing bull marvellously painted on the lower surface of a crystal plaque—illustrated by an enlarged coloured drawing—gives us a glimpse of the high perfection already attained in a Minoan Art more characteristic of the *Sei Cento*. In view of the parallels that they present to the miniature and other small Minoan wall-paintings, it has also been thought desirable here to supply some examples of the inlaid designs on weapons from Mycenae and elsewhere that have been well described as 'painting in metals'. Thanks to the valuable assistance of Monsieur E. Gilliéron, fils, it has been possible to accompany these by a graphic record of the successive processes by which they were produced, and to add the first authentic illustration of the remarkable engrailed design of the 'Swimmers', recently revealed by cleaning on a blade from the Vapheio Tomb.

This series of designs in the 'Miniature' style finds its counterpart in a class of intaglios on signets, the funereal association of which can often be authenticated. The subjects of these—interesting examples of which occurred on clay sealings from the Palace itself—can in most cases be shown to have, directly or indirectly, a religious character, and from this point of view, as well as from the sympathy that it shows with the particular branch of the limners' Art referred to above, it has been thought desirable to give a somewhat detailed account of the most remarkable relic of this class. This is the massive gold signet-ring, containing representations of not less than fourteen figures, found in a beehive tomb of Nestor's Pylos, and which it was my good fortune—as the result of a special journey—to rescue from the hands of its native owner.[1] It is not too much to say that the successive scenes depicted on this ring supply our first authentic knowledge of the Minoan After-world—an Elysion rather than a Hades. The idea of resurgence is itself graphically conveyed by two chrysalises and corresponding butterflies above the Goddess's shoulders. At the same time the striking parallelism displayed by the style of the figures and of the whole composition with the miniature class of wall-paintings has suggested an actual translation of the design into colours on the model of one of these.[2]

The reconstitution of the structures above the Northern 'Lustral Area', by which the remains have been saved from progressive disintegration, has made it possible to furnish an adequate record of what is one of the most elegant monuments of the site. Its sunken basin, indeed, and the sombre tone of the wall-painting, now in part restored, made its interior vault a fitting scene for rites connected with the Minoan Goddess as

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[1] See p. 145 seqq., and compare my fuller account *The Ring of Nestor, &c.*, published by Macmillans; and cf. *J. H. S.* 1925. Fresh corroboration of the association of the Minoan Goddess with the chrysalis as the emblem of resurgence to a new life after death is given here from a Vapheio ring (p. 148, Fig. 97).

[2] Coloured Plate XX A, facing p. 157.

Lady of the Underworld. In the same way, the parallel work on the Northern Entrance Passage has brought with it a better knowledge of this once splendid avenue of approach, overlooked on either side by the Porticoes containing the great bull-grappling reliefs in coloured plaster. These plastic compositions, to which the noble head of the charging bull belongs, have been here brought into relation with the Elgin slabs of Knossian gypsum from Mycenae, showing a similar head and the forefeet of a stationary bull. The full illustration of dual compositions, referring respectively to the hunting of half-wild bulls and the contrasted scene in which a decoy cow is used, has been traced in detail in the reliefs on the Vapheio gold cups.

At the same time, the great work of reconstitution of the upper stories carried out in the 'Domestic Quarter'—thanks to the new facilities for support supplied by reinforced concrete—has made possible a fuller understanding of the structural and decorative details of the great Halls on that side. The shield frieze, a copy of which is now set up in position in the lobby opening from the second landing of the Grand Staircase, is seen to give a satisfactory key to the actual arrangement of the 'Hall of the Double Axes' below, where restored replicas of the shields themselves have now been hung on the similar spiral bands above the dado. The evidence, now more fully interpreted, of the traces left in fallen stucco has also afforded adequate information of a wooden throne and canopy that had been fixed in the adjoining section of the Hall. The story of the contiguous 'Queen's Megaron'—the centre of the women's domain in the Palace—has been greatly augmented by the revelation of the earlier system, of which the fine 'mosaiko' pavement was in part uncovered beneath the floor of the later hall. The 'Megaron' itself, as now resuscitated, with its bath-room and other conveniences, calls up a vision of social life and amenities such as it would be hard to parallel in the Ancient World.[1]

The relics found in the area behind, precipitated from a windowless upper 'Treasury', have been placed together in a collected group. Apart from the ivories, the most remarkable of these are steatite objects which as fitted together prove to be the locks of a Sphinx of Hittite type, of which a complete example from Tylissos has been here added to one already known from Hagia Triada. These objects, with a socket in the back, are shown to be descendants of similar Chaldaean stone vessels, some of which seem to have served as inkstands. The remote antiquity of this type has been demonstrated by the recent discovery of one in the form of a boar in a very early stratum at Ur.

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[1] See the Coloured Frontispiece to this Volume.

Among the ivories, the figurines of leaping youths, the remains of which are here fully illustrated, may be said to excel all known works of the kind in the *élan* and free action that they display. The remains of a small relief of an ivory Sphinx in the Minoan style, part of a miniature painting of a pillar shrine adorned with double axes, and two bronze axes themselves of the diminutive cult type, made it strange that no figure of the divinity itself should have occurred in the deposit. On the other hand, such an ivory figure, seen by a competent archaeologist in private hands at Candia, shortly afterwards emerged on the other side of the Atlantic as the 'Boston Goddess'—divine sister of the Lady of Knossos,—holding out in this case golden snakes. The opinion, shared by our foreman and others, that this had been abstracted from the Ivory Deposit has certainly not lost in credibility from a remarkable sequel. Also emanating from private possession at Candia, but released after a further discreet interval of time, an ivory figure of a boy-God made its appearance. Having been successful in rescuing this from the midst of doubtful elements in a Parisian dealer's hands, it has been possible to ascertain the fact that it not only answers to the other in its exquisite naturalistic style and individuality of expression, but, as shown standing on tiptoe and coifed with a high tiara, corresponds within a millimetre or so in measurement. The two figures in fact form a single group of the divine Child God saluting the Mother Goddess.[1]

An illustration of the Minoan worship of the Mother and Child had been already supplied by the painted clay figurine of a later date found in a tomb of the Mavro Spelio Cemetery at Knossos. It is supplemented by a design on a gold signet-ring of the religious class recently found at Thisbê and published here for the first time.[2] On this we see the Holy Mother seated with the Babe on her knee and approached with gifts by adorant chieftains, remote predecessors of the Magi.

It will be seen that from the point of view of Comparative Religion this evidence—like that supplied by the subjects on the 'Ring of Nestor'—is of the highest interest.

Important as are the remains of the 'Domestic Quarter' and the associated relics, it looks as if, in the later phase of the M. M. III Palace, as well as throughout the succeeding epoch, the monumental and artistic aspects of the building found their chief centre in a great East Hall, occupying the area immediately North of that quarter and approached from the Central Court by a stepped portico, facing, though on a larger scale, the 'Stepped Porch' on the other side of the Court. An earlier East Hall, to which the beautiful 'Ladies in Blue' fresco belonged, had been built at a lower level, somewhat below that of the pavement of the Court. A reconstruction of the plan of the later Hall[1] is here given, based on the well-preserved lines of the basement structures, while the existence of the central light-court is further assured by the existence of the head of the shaft by which it was drained. From the porticoes surrounding this had unquestionably been derived the remains of a series of painted high reliefs that had been precipitated into the space to the South-East at the time of the final destruction of the building.

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[1] See the restored arrangement, p. 456, Fig. 318, below.

[2] P. 471, Fig. 328

These noble fragments, which must be regarded as representing the final development of the Minoan Art of plaster relief, are for the first time fully illustrated in the present Volume, and to the description of the most important specimens I am happily able to add notes kindly supplied to me by the late Sir William Richmond, R.A., whose artistic sense and special technical experience give a lasting value to his appreciations. For anatomic observations on these works I am also greatly indebted to Professor Arthur Thomson, F.R.S. The reliefs themselves are almost exclusively of an agonistic character and belong to boxing and wrestling bouts or the episodes of bull-grappling scenes. With them were also remains of a frieze of a more architectonic character, consisting of opposed pairs of Griffins, tied to columns. Fragmentary as they are, these various high reliefs represent the culminating achievement of Minoan plastic Art. The anatomical knowledge here displayed, the natural rendering of human forms, the delicate treatment of the flesh surfaces, combined with the most powerful muscular action, raise these works—executed not later than the first half of the Sixteenth Century B. C.—to a level of artistic execution that, on the same lines, has hardly been surpassed by any later Age.

It is tantalizing, indeed, that, for the completion of the figures and composition to which these fragments belong, we should only be able, and that occasionally, to turn to small reliefs on vases or to intaglios on gems and signets.

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[1] P. 491.

Another very interesting discovery made on the borders of the area occupied by the East Hall was of the same tantalizing nature. This consisted of large bronze curls belonging to the upper part of the forehead of a gigantesque female figure[1] that had been wrought in a perishable material, a clue to which may be found in the carbonized mass in which it lay. We have here in fact the evidence of a *Xoanon* or wooden image, such as the 'Daedalid' works still preserved at a comparatively late date in Greece, that may have stood on the back section of this great Hall. It doubtless represented the great Minoan Goddess in one of her aspects, and its presence would mark the Hall as a temple as well as a meeting place.

The circuit of the building included in this Volume may be said to complete the general survey of the structures and of the artistic and other remains belonging to the great Transitional phase of Minoan culture that covers the whole of the M. M. III Period. It has also inevitably included something of the succeeding Late Minoan style in the days of its early maturity, since, indeed, much of the later decorative system of the 'Domestic Quarter'—illustrated by the 'Shield Fresco', by the spiraliform dado bands in general, and by the traces of an extension of the Processional friezes to this region—belongs, as is fully demonstrated in these pages, to an intermediate era of partial restoration that dates from about the close of L. M. I *a*. To this, too, doubtless, the 'Taureador' panels must themselves, as a whole, be ascribed.

It is clear that a good deal of the decoration of this epoch remained on the walls to the time of the final catastrophe. But we already observe its supersession in places, and notably in the Hall above that of the Double Axes and adjoining East-West Corridor, by wall-paintings in the later style that marks the very latest phase of the Palace history and corresponds with the mature L. M. II Period.

A consideration of the remains of this later class—which represent the artistic fashions of the Age that saw the final destruction of the Palace as a Palace—is reserved for the concluding Volume (IV) of this work. The purest centre of these is to be found in the 'Room of the Throne' in the West section of the building with its antechamber and surrounding structures, which, as already pointed out, belong exclusively to this Period. Additional evidence is also afforded in that Palace section by the West Porch, with the remains of a bull-grappling fresco, and by the Magazines on that side in their existing state, comprising the bulk of the great store jars. There is also a mass of fine ceramic evidence from the Western borders of the building in the shape of large painted vases in the highly decorative 'Palace Style'.

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[1] See pp. 522–4, Fig. 365, 366.

In the concluding Volume of this work must also necessarily be included some account of the inscribed tablets of the Linear Class B, which equally mark the latest stage in the Palace history—though in some cases they possibly go back to the closing phase (*b*) of L. M. I. The most important deposits of these are also associated with the Western Palace region, though they also occur throughout the site. Of these tablets I hope to give a more complete description in the concluding part of my *Scripta Minoa*, but no account of the Palace in its latest stage could be adequate without considerable reference to these clay archives. Although the script itself still eludes decipherment, the general purport of many of the documents is clear owing to the illustrations that they give of the objects to which they refer, while the accompanying numeration is also intelligible. They thus supply a very extensive source of information as to the contents of the Palace Magazines and Treasury as well as of the royal Arsenal and Mews at this epoch.

It is impossible for me to give adequate acknowledgement of the varied assistance afforded me in the present Volume by many kind friends and fellow workers. I am particularly indebted to my French colleagues, Messieurs J. Charbonneaux, Fernand Chapouthier, and R. Joly, for enabling me to profit by the results of their epoch-making discoveries in the Palace of Mallia.[1] For sphragistic records Dr. Doro Levi's supplementary account of the clay sealings of Hagia Triada and of Zakro has also been of special service.[2] Valuable assistance in the field of Egyptian and Oriental research has, as usual, been freely given me by Dr. H. R. Hall of the British Museum, and Mr. E. J. Forsdyke has kindly looked over for me the proofs of this Volume. Useful suggestions regarding the Minoan '*rodeo*' have been due to my friend Professor Baldwin Brown. On the other hand, I have suffered an irreparable loss by the untimely death of Dr. Stephanos Xanthudides, who did so much to illustrate the pre-history of his native Island, whose generous help was always forthcoming, and to whom I had been constantly indebted in the earlier Volumes of this work.

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[1] Three recent publications by these explorers in the *Bulletin* of the French School at Athens (1928) may here be mentioned. F. Chapouthier, *Une Table à Offrandes au Palais de Mallia* (cf. p. 392 seqq., below); R. Joly, *La Salle hypostyle du Palais de Mallia*; J. Charbonneaux, *L'Architecture et la Céramique du Palais de Mallia*.

[2] Doro Levi, *Le cretule di Hagia Triada e di Zakro*, in the *Annuario* of the Italian School at Athens, 1929.

To Monsieur E. Gilliéron, fils, I am again greatly beholden for many fine drawings, including those illustrative of the technical processes made use of by the Minoan artists in inlaid metal-work. To his recent labours has been also due the restoration in the Palace itself of the 'Shield Fresco' on the Staircase Lobby and of the actual shields themselves in the great Hall below. Mr. Piet de Jong, the Architect of the British School at Athens, who has carried out, under my direction, the recent work of reconstitution in the Northern and Eastern Sections of the building, has executed a series of restored plans and elevations, notably of the elegant structures above the Northern Lustral Basin, of the Northern Entrance, with the porticoes above on either side, and of the Eastern Bastion, with its remarkable water-system. With the new facilities supplied by the use of ferro-concrete he has completed the work of roofing over the lower Halls and subsidiary structures of the 'Domestic Quarter' by the restoration of the upper floor, and in the case of the Grand Staircase this work of reconstitution has reached the fourth landing and adjacent lobby. For all these later undertakings the immense task already accomplished in this area by Mr. Christian Doll happily afforded a secure basis, and his meticulously accurate measurements have stood all tests.

As a result of these extensive works of conservation and resuscitation not only has a great part of the history of this part of the building been set forth in a permanent manner, but the progressive disintegration of gypsum surfaces from the effects of exposure to the heavy Cretan rainfall has been radically checked throughout a considerable area. It is with special satisfaction that I am able to record that the strength and stability ensured to the reconstituted structures by the use of this new method has enabled them to resist with complete success the fresh severe shock of earthquake that took place in February of this year.

ARTHUR EVANS.

YOULBURY, BERKS., NEAR OXFORD,
March 20, 1930.

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§ 68. 'NORTH-WEST INSULA' NORTH OF CENTRAL COURT, WITH RAMP PASSAGE FROM N.W. PORTICO AND LUSTRAL AREA: BASEMENT CHAMBERS ABOVE EARLY KEEP.

'North-West Insula'—its artistic revelations; Functional importance—supplements that of Western borders of Central Court; Area West of Central Court chief Cult Centre—retrospective view; 'Stepped Porch', built over earlier Cists; Block North of Porch, of L. M. II date: Includes 'Room of the Throne'; N.E. Corner of old façade and of Early Western 'Insula'; North-Western 'Insula' formed by 'Early Keep'; Elements of fortification in Early Palace; Ramp passage round Keep from N.W. Entrance; 'Initiatory Area' and Votaries' entrance; 'North-West Lustral Basin' of M. M. III a *date; Restored plan and elevation of 'Lustral Basin' and Superstructures; Isolation of Sunken Area from other buildings; Minoan bronze 'key' found in doorway of later passage; 'North-West Entrance' partially blocked; Basement Chambers above 'Early Keep'; Plinth bordering Court, and steps down; M. M. II* a *paved floor over Walled Pits, belonging to large basement Chamber; Later dividing wall—M. M. II* b*; Gypsum steps re-used for pavement; Central Pillar of Western Basement in M. M. II* b*; Exceptional evidences of stratification in 'Room of Knobbed Pithos'; Large black steatite vessel with spiral reliefs; 'Saffron-Gatherer' Fresco; Later floors with stone lamps and tablets of Class B; L. M. III* a *floors above these; Basements bordering Central Court; Rearrangement of supporting pier; Further evidence supplied by 'Room of Knobbed Pithos'; M. M. III* a *pottery below later pavement (M. M. III* b*); Extension of M. M. III* b *floor, its continuous use in restored Palace; 'Miniature Frescoes' and Spiral Ceiling fallen on this level; Stone lamps, and basins for ritual sprinkling.*

The 'N.W. Insula'.

THE Palace region to which we are now led, to the North of the Central Court, may be fittingly described as the 'North-West Insula'. Its Eastern and Western boundaries are indeed well defined, on the one side by the 'North Entrance Passage', on the other by a ramp passage winding up from the North-West Portico round the massive outer walling of the 'Early Keep', which forms the nucleus of the 'insula' (see Plan, Fig. 1 B, facing p. 7). As regards its upper structures this region had suffered much dilapidation, but it proved to be of the first importance in the revelations that it has afforded of certain classes of artistic work.

Here was brought to light the 'Saffron-Gatherer' fresco, the earliest figured painting of which any record has been left at Knossos. Here, too, Its artistic revelations.

derived from a corner sanctuary, lay the fallen remains of the 'Miniature' frescoes, illustrating an astonishingly lively development of pictorial design in the transitional Age that heralds the 'New Era'. On the Northern borders of this area, beneath and near a later threshing-floor, great heaps of pieces of painted plaster were uncovered, some of them—like those depicting parts of an embroidered robe—of exceptional interest. On the other hand, by the bastions of the adjoining Corridor East, precipitated from the back wall of the portico above overlooking the 'North Entrance Passage', there occurred a series of fragments of painted stucco reliefs belonging to an extensive frieze representing bull-catching scenes and, included among them, the noble head of what to the Minoans was the King of Beasts. Various comparisons, as will be shown below, enable us to recover the general character of this composition. Together with a companion frieze on the opposite side of the Entrance Passage, it seems in a special way to have impressed the imagination both of contemporary and later beholders, and a reminiscence of its designs is traceable on the Vapheio Cups as well as in two sculptured plaques brought by Lord Elgin from the 'Tomb of Agamemnon'.

Functional importance of 'N.W. Insula'.

The functional importance of this 'Insula' was also great, owing to the fact that what is *ex hypothesi* a pilgrims' entrance from the 'Initiatory Area' beyond, with its 'lustral basin', led here, as already mentioned, by a winding ramp and passage way to the N.W. Corner of the Central Court and thus to the sanctuary region on its Western side. That this sanctuary character was shared by a large part of this 'North-West Insula' bordering the Court on the North appears from the data supplied by a series of finds made within it. This region in fact takes up and illustrates on its own lines the religious functions fulfilled in a pre-eminent degree by that West of the Court. These have received detailed consideration in the concluding Sections of the preceding Volume of this work, but it may be well to recall here the salient features of the sanctuary quarter on that side to which the ramp passage primarily led.

Retrospective View of Sanctuary Area W. of Court.

Area West of Central Court: chief cult centre: retrospective view.

The Palace region between the Upper Long Corridor and the Northern section of the façade bordering the Central Court, as shown in the restored plan (Fig. 1 A), includes within it a group of structures that sufficiently mark it as the true cult centre of the restored building.

Its nucleus is the 'Tri-Columnar Hall' which forms the principal objective of a splendid architectural suite, beginning with the 'West Porch' and the 'Corridor of the Procession' and directly approached by the 'South

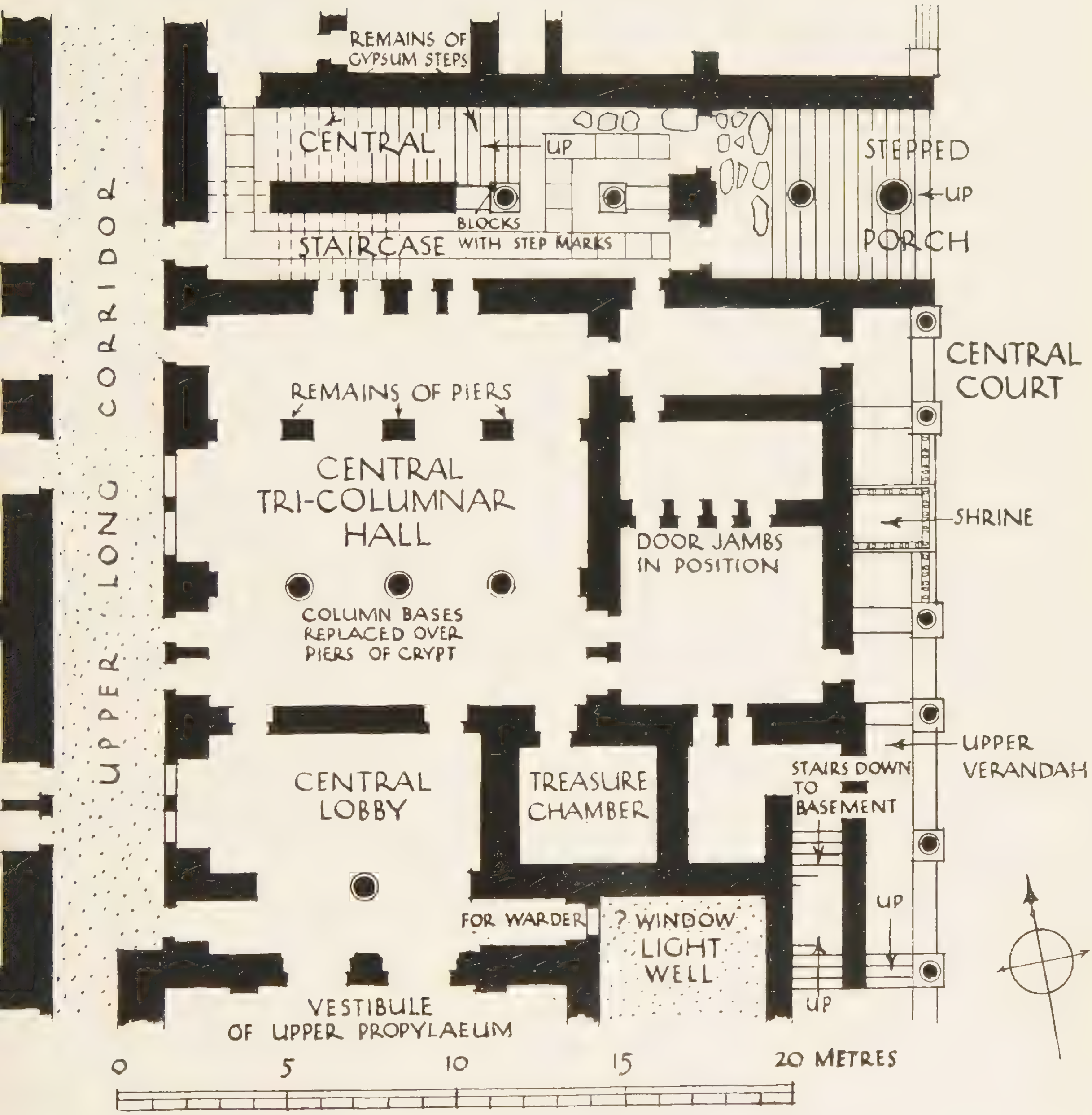
REMAINS OF GYPSUM STEPS
CENTRAL STAIRCASE
UP
BLOCKS WITH STEP MARKS
STEPPED PORCH
UP
UPPER LONG CORRIDOR
CENTRAL COURT
REMAINS OF PIERS
CENTRAL TRI-COLUMNAR HALL
SHRINE
DOOR JAMBS IN POSITION
COLUMN BASES REPLACED OVER PIERS OF CRYPT
CENTRAL LOBBY
TREASURE CHAMBER
STAIRS DOWN TO BASEMENT
UPPER VERANDAH
UP
FOR WARDER
? WINDOW LIGHT WELL
UP
VESTIBULE OF UPPER PROPYLAEUM
0
5
10
15
20 METRES

Fig. 1 a. Restored Plan showing Upper Floor of Sanctuary Quarter, West of Central Court. (Reproduced from Plan C at the end of Vol. II, Part 2.)

Retrospect of Sanctuary Area to West.

Propylaeum' and its stepped continuation above, through a Central Lobby. At the South-East angle of this Hall opens, as described above, a small chamber which, as its contents show,—including the finely carved 'rhytons' in the shape of lions' and lionesses' heads—served as the Treasury of a Sanctuary. Two of the columns of the Hall were in fact supported by the stone pillars of corresponding crypts below, to which—in view of the vats for the blood of victims, the double axes repeated on the pillars themselves, and the numerous analogies now available—a sacral character must certainly be assigned. These dark vaults, dedicated to the cult of the sacred weapon and its associated divinity, led in turn on the Court side to a small columnar shrine of the Minoan kind, in the North wing of which was found a whole deposit of clay seal-impressions depicting the Minoan 'Rhea' herself on her lion-guarded peak.

'Stepped Porch' built over earlier cists.

The adjoining 'Temple Repositories' of the preceding Palace sanctuary, the date of which goes back within the borders of the earlier phase (*a*) of M. M. III, had been paved over by the restored basement floors. At the same time, too, the contemporary system of cists containing similar ceramic remains that ran North from the Eastern Repository had been covered over by the newly constructed 'Stepped Porch' which gave access from the Court to the Central Staircase of this wing of the building. The steps of this Porch also form a break in the double façade that runs South along the whole border of this Section of the Central Court.[1]

Intrusive structural block N. of Porch.

The inner façade belonging to the earlier Palace and consisting of gypsum orthostats on a limestone plinth can still be traced beneath the steps of the Porch. Beyond this point, however, both it as well as the Northern series of M. M. III Cists, and indeed the whole palatial unit to which the Central Staircase belongs, are entirely broken off by an intrusive block of somewhat later date and which in fact bears every evidence of dating from the latest Palace period (L. M. II).

Including 'Room of Throne'.

The principal chambers of this block are the 'Room of the Throne' and its Ante-room, but, as the decoration and contents of these connect themselves with the closing phase of the building, it has been thought better to reserve a description of them to a later Section.[2] Here it need only be observed that this conglomeration of Chambers, following on to the earlier remains of the sanctuary quarter of the Palace, presents itself a strong religious character, as is clearly shown by the lustral area and small 'Consistory' hall round which it centres.

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[1] See *P. of M.*, ii, Pt. II, p. 798 seqq., and Fig. 525, p. 803.

[2] In the concluding volume of this work.

L. M. II pottery under thresholds of ante-room.

A *terminus a quo* for the dating of this intrusive block of buildings was supplied by the remains of pottery found under the second and third thresholds (from the South) of the doorways leading down to this Ante-chamber from the borders of the Central Court, which in addition to some L. M. I fragments contained others of the best 'Palace Style' belonging to the early part of L. M. II.[1] These doorways preserved the line of the outer façade and abutted on the slabs of the same limestone pavement that occurred elsewhere on this side of the Central Court. This pavement, of which the best preserved remains lay, as already noticed,[2] in the North-West angle of the Court, was itself clearly contemporary with the earliest elements of the restored building. In this angle, as has been shown, it had displaced an earlier M. M. III pavement immediately superposed on a well-marked stratum the latest elements of which belonged to M. M. II and which itself immediately overlay the Neolithic—another proof of the levelling away of the intermediate strata on this part of the hill in order to lay out the Central Court and the adjoining regions of the Minoan Palace.[3] In this stratum, in a M. M. II *b* medium, was found the lower part of the diorite Middle Empire statuette of User.[4]

Cistern and drains.

In the same layer, at depths varying from 50 to 70 centimetres, there came to light two small stone drains which converged on a common channel running East to a larger stone-built tributary of the main 'Cloaca' of the Central Court (see Fig. 9). The more Southern[5] of the two small conduits, running from the South-West, had been cut off by the front line of the Ante-chamber of the 'Room of the Throne'. The more Northern proceeded from a cistern bordering the North-West corner of the earlier façade. In it occurred M. M. II *b* pottery including a polychrome cup. The cistern for which it provided an overflow channel had been, no doubt, filled by rain-water from the roof-terraces of the earlier façade line.

N.E. corner of old façade and early 'insula'.

On the Northern border of the Ante-room of the 'Room of the Throne' to which the later frontage line here belonged, the older line—blocked up to this point by these intrusive structures of the concluding Palace period—reappears for a short distance. Its plinth and orthostats, however, almost at once curve Westwards forming a rounded outline which, as already observed, corresponds with what seems to have been a similar feature at the diagonally opposed South-West Corner of an extensive 'insula' of the Palace in its original form.[1]

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[1] 1913 tests 59, 60.

[2] *P. of M.*, ii, Pt. II, p. 800, Fig. 522.

[3] See *P. of M.*, ii, Pt. I, p. 5.

[4] *Ibid.*, i, p. 286 seqq.

[5] The more Southern of these drains, which was better preserved, was 30 cm. deep and 12 cm. wide. The upper border of its side slabs was 50 cm. beneath the surface, that of the other drain 70 cm.

North-Western 'Insula' formed by 'Early Keep'.

N.W. 'insula' formed by 'Early Keep'.

The Corridor that follows the Western turn of this old angle of the façade—named from a stone basin found within it—separated the large West 'Insula' in question from another very characteristic structural island also dating in its inception from the earliest or 'proto-palatial' stage of the building. This is the 'North-West Insula' already mentioned as that with which we are in this place principally concerned. Its area, as we have seen, was originally composed of the 'Early Keep', which dominated the Northern approach to the Palace and at the same time the North-West Section of the Central Court.[2]

This building, with its massive walls and deep dungeon-like, walled pits, recalls the donjon of a Norman Castle. However comparatively open most of the building may from the first have been, it is difficult not to recognize in this tower-like structure, guarding the Sea-Gate of the Palace, a real stronghold for its early princes. It may be added, indeed, that the same fortificatory intention attaches to the adjoining Northern Entrance system and in a high degree to the mighty walls that run East of it in parallel lines, the more so as in the upper part of this area there was no such need as on the Eastern slope beyond of massive terrace walling. The blocks may well compare with those of the citadels of Tiryns or Mycenae.

Elements of fortification in Early Palace.

It is true that the generally open character of this and other Cretan cities under the *Pax Minoica* of later days points to the neglect of such defensive works. But we are already warned by the massive *enceinte* walls of the 'City of Refuge' on the sacred height of Juktas, going back to the very beginning of the Middle Minoan Age,[3] that the need of fortification was still recognized in Crete at the epoch answering to the 'proto-palatial' stage at Knossos.

In the Cyclades,[4] at Phylakopi in Melos, at Chalandrianê in Syros, at St. Andreas in Siphnos, and elsewhere we have evidences of similar walled strongholds going back in some cases at least to the last Early Cycladic Period, contemporary with E. M. III. The faïence mosaic, moreover, in any case not later in date than the beginning of M. M. III, has given us a

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[1] See *P. of M.*, ii, Pt. II, p. 661, and cf. Vol. i, p. 130, Fig. 96 (also Vol. ii, p. 799, Fig. 521).

[2] For the 'Early Keep' see Vol. i, pp. 136–9 and Figs. 100, 101. Its area is indicated by a white line in the General Plan A at the end of Vol. ii.

[3] See *P. of M.*, i, pp. 156, 157.

[4] See especially D. Mackenzie, *Phylakopi*, pp. 255–8.

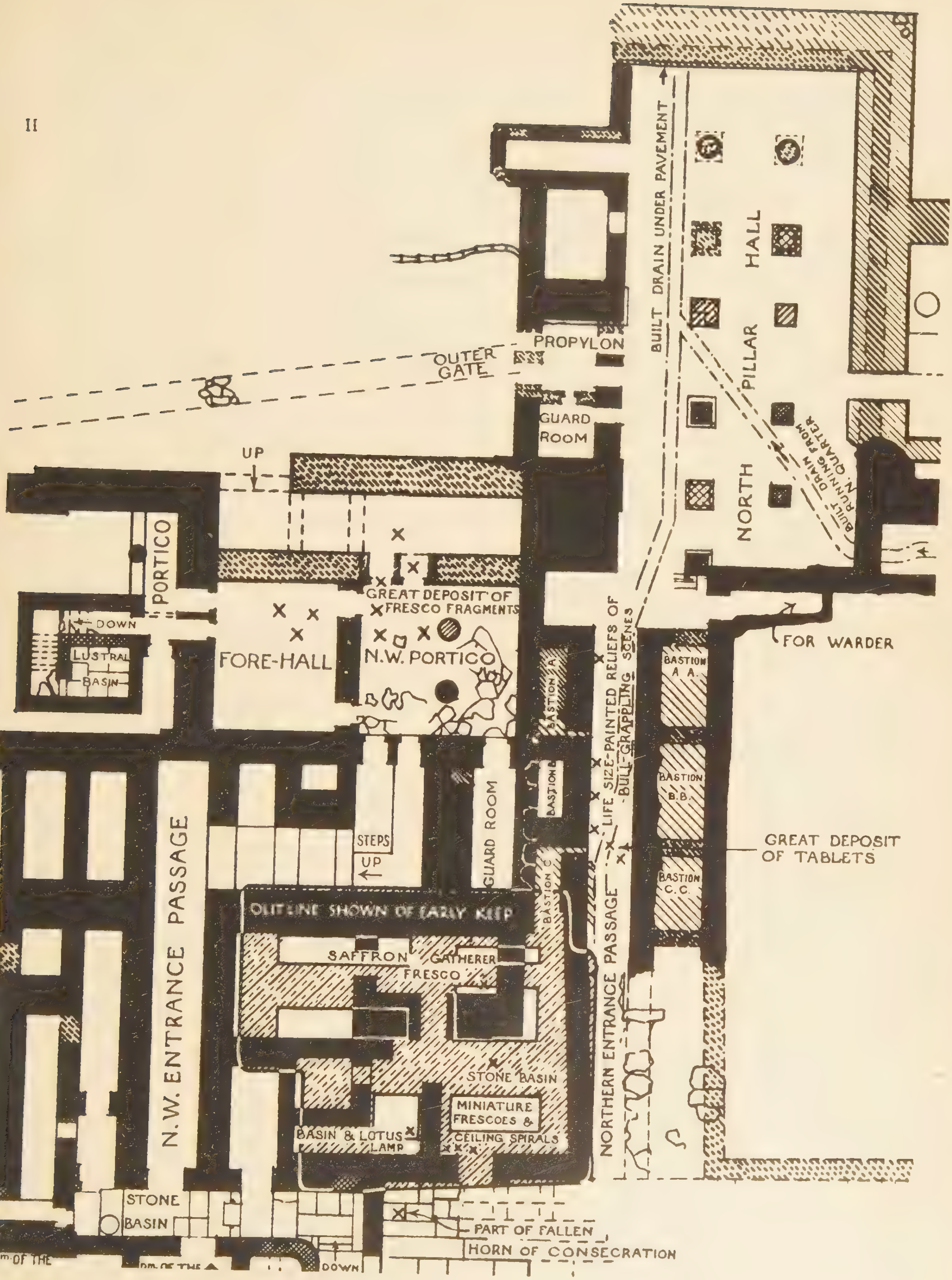
BUILT DRAIN UNDER PAVEMENT
NORTH PILLAR HALL
PROPYLON
OUTER GATE
GUARD ROOM
UP
BUILT DRAIN RUNNING FROM N. QUARTER
PORTICO
DOWN
LUSTRAL BASIN
GREAT DEPOSIT OF FRESCO FRAGMENTS
FORE-HALL
N.W. PORTICO
FOR WARDER
BASTION A
BASTION A.A.
LIFE SIZE-PAINTED RELIEFS OF BULL-GRAPPLING SCENES
BASTION B
BASTION B.B.
GREAT DEPOSIT OF TABLETS
BASTION C
BASTION C.C.
STEPS UP
GUARD ROOM
N.W. ENTRANCE PASSAGE
OUTLINE SHOWN OF EARLY KEEP
SAFFRON GATHERER FRESCO
NORTHERN ENTRANCE PASSAGE
STONE BASIN
MINIATURE FRESCOES & CEILING SPIRALS
BASIN & LOTUS LAMP
STONE BASIN
PART OF FALLEN HORN OF CONSECRATION
DOWN

Fig. 1 b. Plan of Part of North Palace Section showing Area of 'Early Keep', N.W. Portico and Entrance Passage and Northern Entrance System.

glimpse of a fenced city, perhaps the port town of Knossos, with outer towers and houses on the wall, in addition to its street façades. If, moreover, during the later epoch, unified dominion and immunity from foreign attack led to the comparative disuse of such precautions in Crete itself, there is no reason to suppose that walled defences were neglected in the more outlying districts of the Minoan World. Certain traditions, indeed, of this older system of fortification clung to both the palatial and the civic architecture of Crete down to Late Minoan times. The system of successive returns in the wall line—a survival of projecting bastions such as we see them in early Anatolian sites like Sendjirli—so characteristic of the West façade at Knossos, recurs at Phaestos, Hagia Triada, and Gournià, and again in the early Palace of Mallia.[1]

Ramp Passage from N.W. Portico and Lustral Area.

Ramp passage from N.W. entrance.

It is clear that the 'Early Keep' must have blocked the direct access from the North-West Portico to the Central Court. The course of what was probably an open ramp may be traced, however, stepping up past its N.W. angle and thus abutting on a passage-way leading directly to the 'Corridor of the Stone Basin' referred to above and so to the adjoining angle of the Central Court.[2]

The access to this passage-way from below was through the double gateway opening on the 'North-West Portico'. From the inner vestibule, bordering this entrance on its Southern side, there opens West an elongated space that must always have been uncovered, of the same width as the entrance of about two and a half metres, representing the first section of the original ramp and somewhat overlapping the Northern substructures of the 'Keep'.[3] The ramp, after running a little over four metres West, turned at right angles South, ascending still till it reached a level answering to the original level of the Central Court. Up to this point we must suppose it to have been open, but the passage now passed under cover, debouching by a doorway into the 'Corridor of the Stone Basin' above mentioned and thus gaining access to the North-West corner of the Central Court.

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[1] See *P. of M.*, ii, Pt. I, p. 270.

[2] See Plan A at end of Vol. ii, and cf. Vol. i, pp. 422, 423.

[3] A fine limestone corner block of the North wall of the passage-way marked with the 'spray' sign was brought out in 1928. Of the lower sections of the ramp, the pavement had not been preserved, though there are some traces of the points where it stepped up. The interspace that it occupied was to a large extent excavated to a considerable depth in 1913 in tracing the substructures of the Keep.

Palatial Function of 'Initiatory Area' and the N. Lustral Basin.

Initiatory Area and 'Votaries' entrance.

It has been already pointed out that this passage-way fulfilled a special function in bringing this part of the building—itself, it appears, containing more than one shrine—into direct connexion with the entrance system that bordered the N.W. Portico—itself essentially sacral in character. This entrance system indeed—forming as a whole the 'North-West Bailey'—seems to have been specially designed to suit the religious requirements of pilgrims or votaries entering the Palace-Sanctuary from that side.

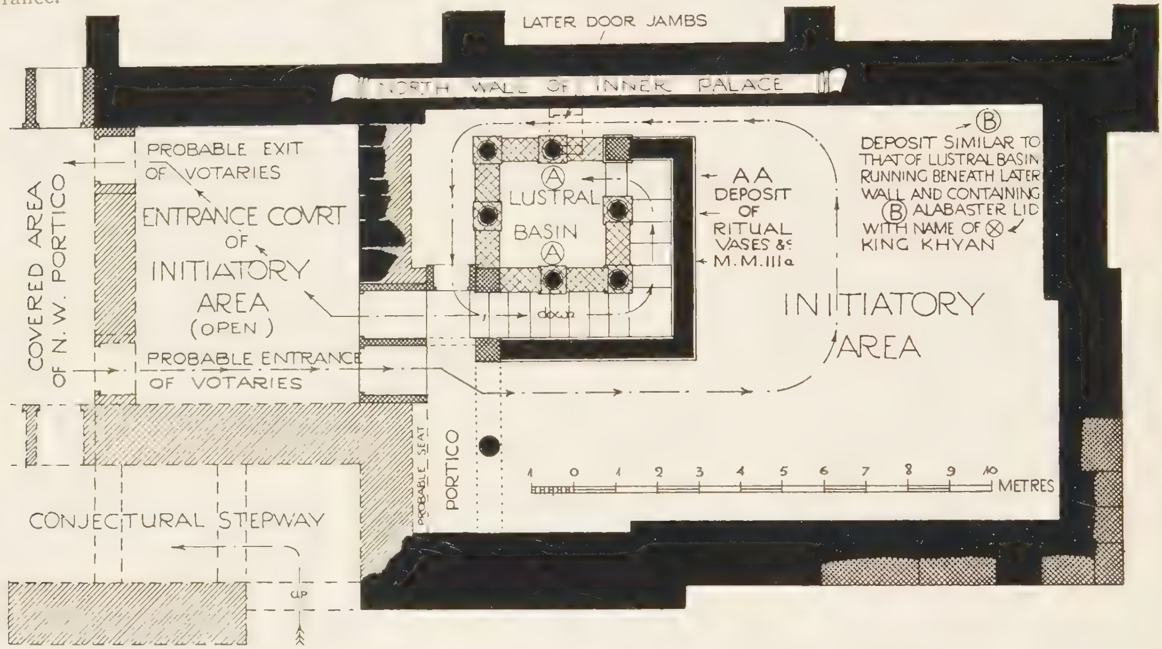
LATER DOOR JAMBS
NORTH WALL OF INNER PALACE
PROBABLE EXIT OF VOTARIES
ENTRANCE COVRT OF INITIATORY AREA (OPEN)
COVERED AREA OF N.W. PORTICO
PROBABLE ENTRANCE OF VOTARIES
A
LUSTRAL BASIN
A
down
AA DEPOSIT OF RITUAL VASES &c M.M.IIIa
B
DEPOSIT SIMILAR TO THAT OF LUSTRAL BASIN RUNNING BENEATH LATER WALL AND CONTAINING B ALABASTER LID WITH NAME OF ⊗ KING KHYAN
INITIATORY AREA
PROBABLE SEAT
PORTICO
1 0 1 2 3 4 5 6 7 8 9 10 METRES
CONJECTURAL STEPWAY
UP

FIG. 2. REVISED PLAN OF 'INITIATORY AREA' AND LUSTRAL BASIN.

The N. Lustral Basin: M. M. III *a* date.

As shown in the revised Plan, Fig. 2,[1] it centres in the remarkable early example of a Lustral Basin, free-standing in a separate Court, described as the 'Initiatory Area', and approached by a kind of Entrance Court, recalling the Fore-hall of the 'Room of the Throne', which contained a similar sunken basin on a smaller scale. Within the 'Initiatory Area', in a contemporary stratum that covered its North-West corner, there came to light a series of remains of vessels such as decorative stone ewers and inlaid bowls of types now known to belong to the initial phase, *a*, of M. M. III and exactly answering to similar remains found in the basin itself. In the same deposit, which seems to have belonged to some kind of Sacristy or Treasury in that part of the Area, was found the inscribed lid of an alabastron bearing the name and titles of the Hyksos King Khyan.[1]

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[1] The original plan (*P. of M.*, i, p. 405 seqq., and p. 406, Fig. 291) has been slightly modified by Mr. Piet de Jong, in accordance with observations made in the course of the work executed in 1928 and 1929.

It is clear that both the stone vessels found in this deposit and those derived from the sunken basin had a sacral character and certain thick-walled vessels of greyish clay found on or near its floor, as in other similar basins, had served for the oil or unguents used for the anointing. The evidence of the use of 'holy-water sprinklers',[2] resembling the *aspergilla* of the Roman Pontifices and still in use in the early Christian Church, makes it probable that some sprinkling of this kind was also included among the lustral rites performed in these sunken basins. For this they were quite adapted, though they could not well have been used for holding water.

In this connexion the recurrence of solid stone basins of various materials, resembling fonts, to be described later on in this Section[3] may be thought to have a special significance.

Restoration of Northern 'Lustral Basin'.

Restored plan and elevation of 'Lustral Basin'.

In order permanently to preserve the fine gypsum material of the interior of the Northern Lustral Basin[4] I decided, as a part of the campaign of conservation, to replace its roof and the supporting columns above its balustrade. This work, begun in 1928 and concluded in 1929, was entrusted to Mr. Piet de Jong (see Figs. 3 and 4 and Suppl. Pl. XXXII). From fallen remains of the painted stucco it has even been possible to restore its general effect on the walls, including the somewhat sombre blue fields above and, below, black panels speckled with white, in imitation of stonework.[5] This sombre colouring was in keeping with the chthonic cult within.

This little structure—now a jewel of the site—was bordered by open spaces on its Western and Northern sides, on which it was probably lighted, as indicated in the restored plan, by small upper windows. The researches of 1929 showed that the N.E. corner of the building abutted on a small portico, the substructure of the central column of which was brought out. This faced the Initiatory Area and was entered by the N. doorway of the Entrance Court (see Plan, Fig. 2). A stone bench probably occupied the recess behind.

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[1] *Ibid.*, i, p. 419 seqq., and Figs. 304 *a*, *b*.

[2] See *ibid.*, ii, Pt. II, pp. 792–5.

[3] See below, pp. 25, 26 and Fig. 13.

[4] For Mr. Theodore Fyfe's admirable sketch of the basin and staircase at the time of its excavation see *P. of M.*, i, p. 407, Fig. 292.

[5] Compare the M. M. III *a* fresco, *ibid.*, i, p. 446, Fig. 321.

In its construction this Northern Lustral Basin most nearly recalls that of the Little Palace,[1] though it was over twice the depth of the other and was approached by sixteen descending steps instead of six. Here, too, in this case on two sides, it was flanked by a narrow passage receiving its light from between the columns of the parapet.

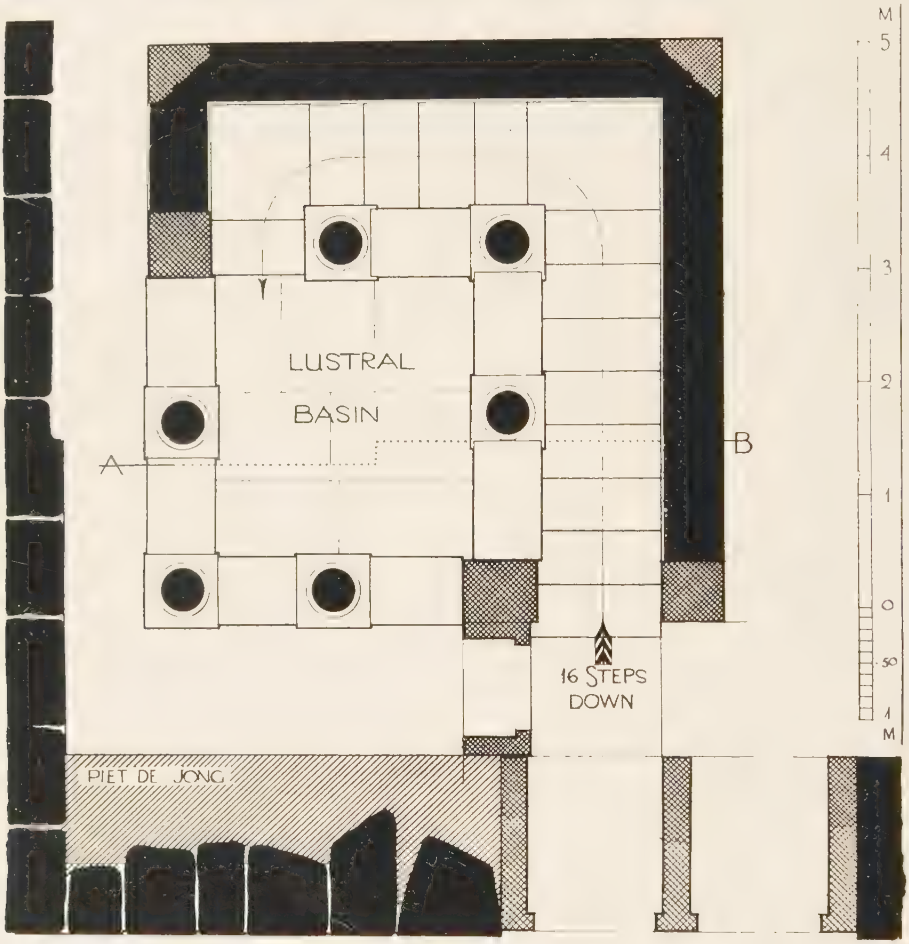

FIG. 3. PLAN OF NORTHERN LUSTRAL BASIN.

Isolation of basin from other structures.

Careful supplementary excavations carried out in 1928 all round the building entirely corroborated the conclusion, embodied in the plan, Fig. 3, that the basin was isolated on all sides. To the North and West it was cut off from any other structure and on the other two sides it was bounded by Corridors. A trench round its outer walls showed that, unlike ordinary

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[1] *P. of M.*, i, p. 405 seqq.

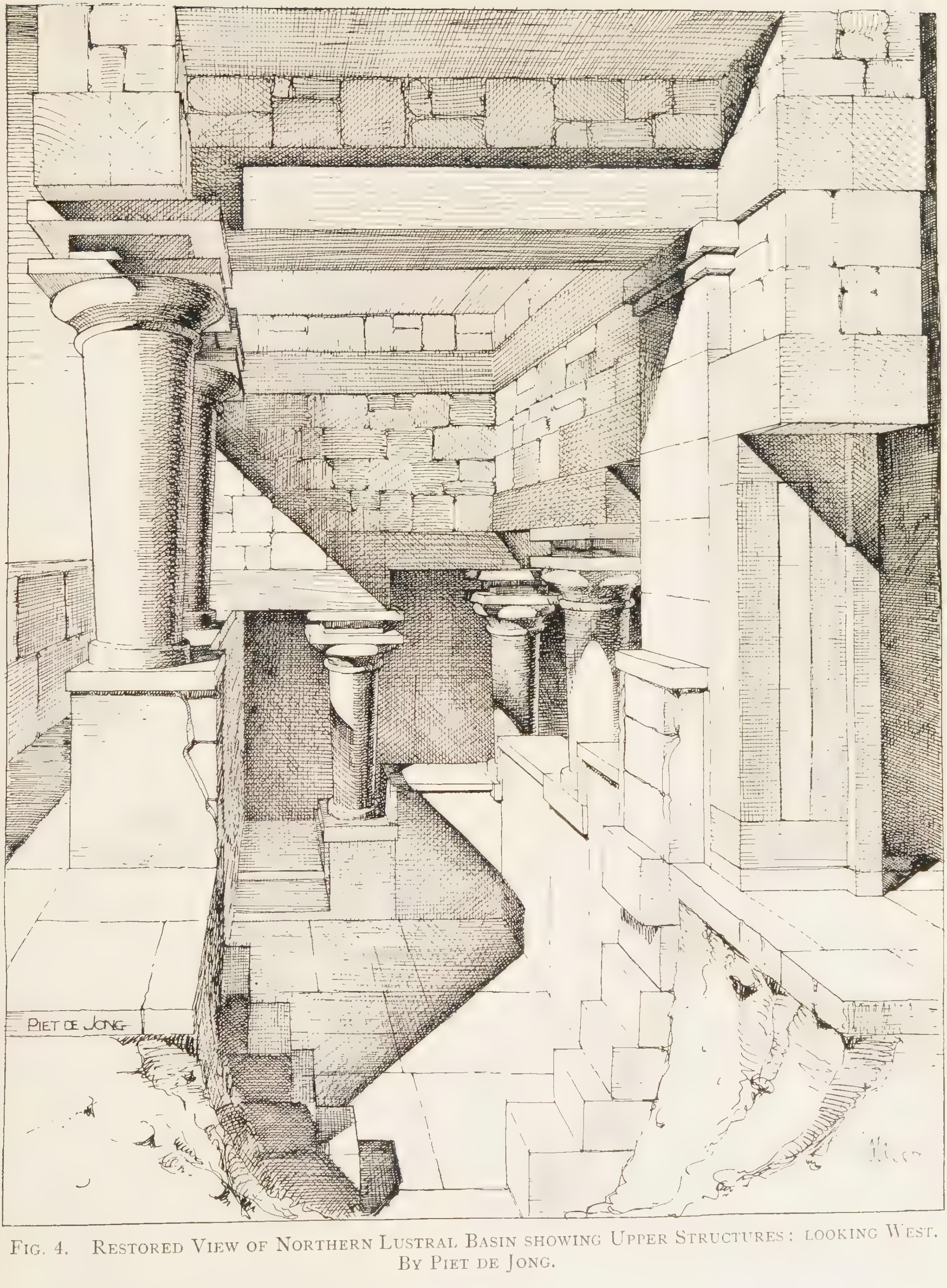
PIET DE JONG

FIG. 4. RESTORED VIEW OF NORTHERN LUSTRAL BASIN SHOWING UPPER STRUCTURES: LOOKING WEST.
BY PIET DE JONG.

basements, they had no connexion with any other walls, the stones being simply built up against cuttings in the virgin soil. This direct contact with Mother Earth and the descent into her bosom beneath the sombre vault above fits in with the suggestion already made that these sunken purificatory basins connected themselves with the Goddess in her chthonic character, as Lady of the Underworld and wreathed with its emblematic snakes. In this earthquake-stricken region it is hardly necessary again to recall the special need of divine protection from the infernal Powers.[1] *A flagello terraemotus libera nos* may well have formed part of a Minoan litany, long before the days when the prayer was taken over by the Christian Church.[2]

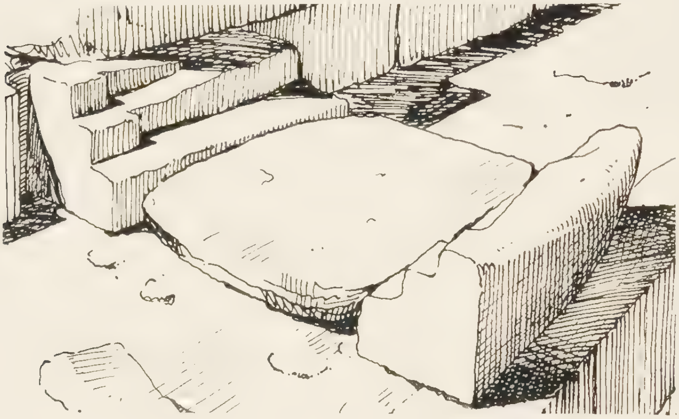

Fig. 5. Plan of Later Doorway in Corridor South of Lustral Basin.

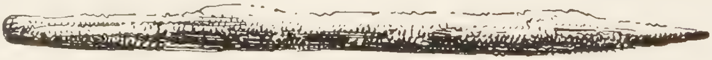

Fig. 6. Bronze Locking-pin or Primitive Key from Doorway South of Lustral Area.

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Dis aliter placitum. It looks, indeed, as if an earthquake shock about the close of M. M. III *a*—of which there seems to be other evidence on the Palace site[3]—played a leading part in the ruin of the Lustral Basin itself. The destruction over this area was indeed so severe that in the succeeding restoration no attempt was made to rebuild this structure. Its basin, choked with charcoal and rubble, was found overlaid by later walls traversing it from South to North. The principal of these, which ran out at a slightly higher level from the massive line of walling that bordered this area on the South side, was shown by the exploration of 1928 to have a doorway consisting of massive gypsum jambs with a threshold of the same material, Fig. 5, above which an interesting find occurred. In the rubble debris near the threshold was a kind of pointed bronze instrument, Fig. 6, in which we may

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[1] See *P. of M.*, ii, Pt. I, p. 322.

[2] *Ibid.*

[3] Ibid., p. 320 and note 2.

Minoan lock in South House.

venture to recognize a primitive Minoan key[1] of the kind used to lock the cellar door of the South House.[2] Mr. Christian Doll's sketches of the door jamb and lock are here reproduced, which curiously anticipate the present discovery (Figs. 7, 8).

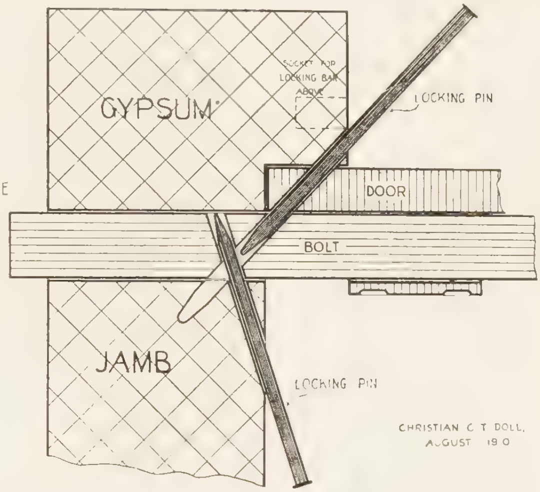

Fig. 7. Horizontal Section showing Primitive Lock: South House. (See, too, Fig. 8, p. 14.)

An interesting feature is to be observed with regard to the locks here illustrated. As will be seen from the horizontal section, Fig. 7, the locking-pin that secured the wooden bar of the door could be inserted on either side of it. The bar itself could only be withdrawn on the inner side by some one in the basement room to which it gave access, but this could not be done unless the locking-pin was first removed from the other side, at the foot of the little staircase leading from the 'Megaron' and entrance system of the house. This arrangement is very characteristic of the carefully devised control system of the Minoan dwellings large and small. The basement room to which the door led gave beyond into a smaller inner cellar or store-room where a hoard of bronze tools was found, the door of which was barred on the inner side while it was itself, apparently, accessible from an interior room above by means of a trap-door and ladder.

Later structures over N. Lustral Basin.

The doorway of the later structure bordering the Lustral basin fitted on South to a wall-line underlying a line of massive blocks that had apparently been taken from the earlier Palace ruins to patch up its main boundary-wall on this North-West section at the time of the general restoration of the building towards the close of M. M. III.[3] The doorway itself and the connected wall built over the choked-up basin must itself have belonged to an intermediate date following on the local catastrophe, which, as we have seen, took place when M. M. III *a* was already stratified.[1]

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[1] From the position in which this object was found it seems less probable that it was a *stilus*, as was supposed to have been a pointed bronze instrument from Palaikastro in the Fitzwilliam Museum.

[2] *Ibid.*, pp. 382–4 and Figs. 217, 218.

[3] To determine the date when it was placed in its present position, I decided, during the work of 1928, to temporarily turn over one of the limestone blocks of this construction. It was of somewhat wedge-shaped form with a good face, showing two double-axe signs of Early Palace type (M. M. I–II), and weighed as nearly as possible 2½ tons. In an untouched element beneath it, among forty sherds, two were intrusive Neolithic, one was a part of a M. M. I *a* cup, and the rest M. M. III, including one characteristic piece

But, although other structures were erected after the filling in of the basin, they had no relation to the original plan, and the special functional character of this area as a place set apart for the purification of those about to enter the building through the adjoining 'North-West Portico' seems to have been given up.

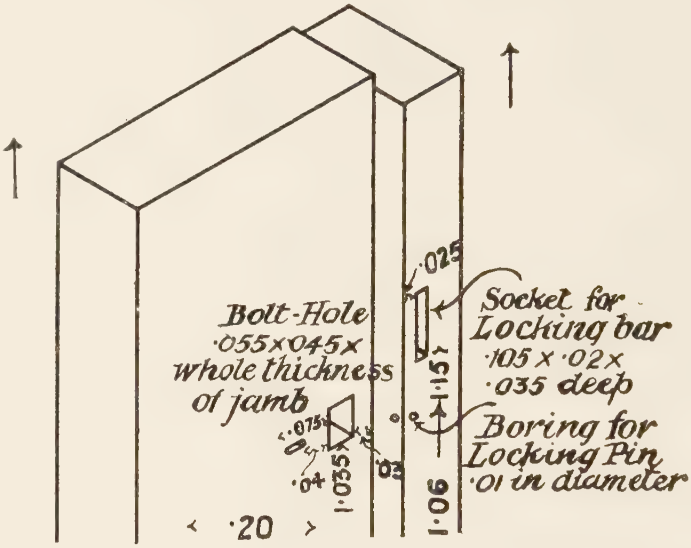

FIG. 8. ISOMETRICAL SKETCH OF JAMB OF GYPSUM DOORWAY, SOUTH HOUSE, SHOWING SOCKETS FOR BAR AND BOREHOLES FOR LOCKING-PIN. BY CHRISTIAN DOLL. (SEE, TOO, DETAILS IN FIG. 7, p. 13.)

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The interior area of the building was entered from this Portico by a double doorway, the inner walling of which consisted of somewhat elongated limestone blocks incised alternately with the 'double-axe' and the 'spray' sign in the same somewhat superficial manner as those of the neighbouring bastions of the Northern Entrance passage. This style of incision—which contrasts with the bolder character of the signs on the interior, for instance, of the existing West façade of the Palace—wherever its date can be approximately fixed—seems to mark the considerable restoration that was carried out some time after a great catastrophe that took place towards the close of M. M. II; in other words it may be described as M. M. III *a*. The evidence that has been already adduced shows that the construction of the 'Northern Lustral Basin' itself and its connected system, including the whole 'Initiatory Area', owed its laying out to the same epoch, at the expense, it would appear, of some earlier arrangement.

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With the filling in of the Lustral Basin and the consequent diversion of

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of its earlier phase (*a*), and several characteristic M. M. III *b* fragments. Of Late Minoan there was no trace.

[1] As a matter of fact sherds of M. M. III *b* type including parts of typical low cups were found beneath the threshold.

Partial blocking of N.W. Entrance in M. M. III *b*.

this purificatory station to other purposes the N.W. entrance of the building lost its importance as a special route for votaries and pilgrims on their way to the central sanctuary. Accordingly, in the restored arrangement, following on the great seismic catastrophe towards the close of M. M. III *b*, one wing of its double portal was blocked with materials taken from the ruins.[1] It looks, moreover, as if the width of the initial section of the ramp passage was reduced to the same extent.

The subsequent formation of a lustral area in connexion with the 'Room of the Throne' would have supplied the means of religious lustration for those entering the North-West corner of the Central Court during the concluding period of the Palace, but the evidence of a similar arrangement for the intermediate period ranging from M. M. III *a* to L. M. II has not been preserved. It must be remembered, however, that the laying out of the Throne Room system, which dates from L. M. II, had entirely obliterated the earlier plan of the area that it occupied.

The existence of the small cistern, dating from M. M. II, on the borders of this area may, however, connect itself with lustral functions, and it is worth noting that inside the adjoining façade on the North side of the Court two alabaster 'fonts' were found, similar to that illustrated in Fig. 13, below.

The Basement Chambers above the 'Early Keep'.

Area behind N.W. section of border of Central Court.

Unfortunately, the upper structures situated behind the Northern part of the façade of the Central Court, in its earlier and later shape, that lay West of the Northern Entrance Passage, have suffered an exceptional amount not only of ruin and denudation, but of disturbance through makeshift arrangements due to later squatters. These structures were superposed on the much more mighty walls of the 'Early Keep'[2] that occupied this area, and which must be included among the 'proto-palatial' elements of the site, the sherds derived from its inner interstices dating no later in fact than E. M. III. The cells or walled pits of this, which seem to have been largely coated with red-faced plaster, went down somewhat over seven metres (about 25 feet) into the Neolithic, their major axis usually running E. to W., and though some of the thick cross-walls of this 'proto-palatial' structure served to support later lines, the general tendency of the later builders was to neglect the early lines. Their foundations were sunk deep down, in some cases as much as their full depth, into the earlier shafts and at right angles to their

Basement chambers above 'Early Keep': new orientation.

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[1] In the course of supplementary researches undertaken in 1928 I raised some of the upper blocks belonging to this miscellaneous blocking and found in the interstices below a certain number of sherds most of them belonging to the advanced stage of M. M. III *b*. No L. M. fragments occurred.

[2] See Vol. i, p. 136 seqq. and Fig. 100, 101.

general axis—from North to South, that is, instead of from East to West. In exploring the lower part of the cells parts of these foundation piers had to be removed and the later wall-lines resupported by means of arches.

Plinth bordering Court, and steps down.

The Northern boundary of the Central Court very nearly corresponds in its Western section with the outer Southern line of the 'Early Keep'. Unlike the Western border of the Court, it shows no signs of a double façade, but there are remains of a single boundary line starting from a point answering to the abutment of the earlier Western façade line of the Court, where the 'Corridor of the Stone Basin' opens, and running originally East as far as the upper angle of the Northern Entrance Passage. (See Plan, Fig. 9.)

From the N.W. corner of the paving of the Central Court in its later stage a plinth resembling that of the Western border of the Court runs East for a distance of 4·75 metres. At this point it shows an opening that stood in relation to a flight of three descending steps of gypsum a good deal worn [1] (see Fig. 9). These, as they were found, seem to have led down to a plaster floor about 43 centimetres below the limestone pavement of the Court. This floor, which is of great importance owing to the relics found on its surface, marks the basement levels on this side as they existed during the period that succeeded the great Restoration of the Palace towards the end of M. M. III *b* and continued to its close.

asement originally eeper.

Subsequent investigations brought out the remains of three more steps, or six in all,[2] demonstrating that the flight had been originally designed for a more deep-lying floor-level. The internal wall construction, however, shows that this flight had been first so centred as to extend a little West of the remaining borders of the uppermost steps on that side in the position in which they were found. The original width, so far as could be judged, was about 92 centimetres, answering to the width of an ordinary doorway.

Beyond this point the plinth of the later façade of the Central Court had been much destroyed, but another small flight of descending steps,[3] that came to light about two metres East of the first, indicated that there had here been a similar opening of the same width.

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[1] Dr. Mackenzie notes that the second and third step had been slightly cut away at the Western extremities in order to get the foundation block of the plinth into position. The plinth itself in its existing shape was an integral part of the restored Palace, dating from the post-seismic M. M. III *b* epoch.

[2] In the Plan, p. 19, Fig. 9, the first four steps only are shown.

[3] These were not like the others of wedge-shaped form, and originally designed as steps, but mere elongated gypsum blocks, re-used. They were evidently of later construction and only led down to the M. M. III *b* floor-level—*ex hypothesi* belonging to the restored Palace. On this floor-level the bulk of the remains of the 'Spiral Ceiling' and 'Miniature Frescoes' were found (see below, p. 30 seqq.).

It thus appears that the façade of the Central Court on this side as on the West flanked a series of basement chambers, the floors of which lay well below the level of its pavement (see Plans, Figs. 1 B, 9). In their original shape they lay even more below the level of the Court as it existed in the earlier part of the Middle Minoan Age.

The stratigraphy of this whole area bordering the North-West section of the Central Court was in many respects more complicated and difficult to decipher than that of any other quarter of the Palace site. It was only indeed with the accumulated experiences of the successive Minoan phases represented in the building, acquired after long years of investigations, that the problem could be successfully attacked.

M. M. II *a* paved floor over walled pits.

Supplementary explorations undertaken by me in 1928 brought to light some gypsum slabbing immediately overlying the wall-tops of the Early Keep and belonging, therefore, at latest to the very beginning of the Second Middle Minoan Period. This floor lay 1·14 metres below the level of the later paving of the Central Court. An interesting fact in connexion with it, brought out in the course of the same investigations, is that a paving slab of this system runs under the South end of the wall that in the later plan separated the Central basement chambers from that to the East.[1] More than this, a further gypsum slab belonging to the same level was found in the S.W. corner of the Eastern basement space and clearly continuous with the other. It thus appears that, according to the original arrangement, after the filling in of the deep walled pits of the Keep, this part of the area formed a single chamber. As a matter of fact the original arrangement of the descending steps ignored the dividing wall.

Large basement chamber.

Later dividing wall M. M. II *b*.

The separation into two rooms by a dividing wall was the work of the succeeding phase of restoration, dating from an advanced stage of M. M. II and marked here by a second gypsum pavement about 25 cm. above that already described as immediately overlaying the wall-tops of the 'Early Keep'. The evidences of this extend to both sides of the wall, and in both cases pottery of the fully developed M. M. II class was found in the intervening deposit -part of a characteristic cup of that epoch being embedded in the interior of the wall itself.

An interesting feature in the remains of the gypsum paving on the West

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[1] West of this wall the floor-level to which this gypsum slabbing belongs could only be traced by means of the continuation of its underlying layer of clay and plaster, which was immediately superposed on the top of the great walls of the Early Keep and of the filling material of its deep-walled cells. The remains of this floor underlay the paving of re-used steps at a depth of 56 cm. beneath its surface. The gypsum pier block belonging to the same later system rested on this early floor.

Gypsum steps re-used for pavement.

side of the wall of division threw a retrospective light on the earlier architectural arrangement of the Palace in this region. The paving proved to have been largely composed, as their acute triangular section shows, of thin gypsum steps with a very broad tread of 65 cm.[1] and a rise, in the state in which they are preserved, of 12 cm. Of their original width there is no certain evidence, but they had apparently belonged to some very gradually descending Corridor on this side, somewhat suggestive of the contemporary 'Stepped Portico' of the South-West corner of the building. They were of two widths laterally, of 1·50 and 1·16 metres, which if we may assume, as was often the case, an alternating arrangement, points to a total width for the step-way of 2·66 metres. It is possible that they may have belonged to some covered section of an early phase of the ramp passage described above.

Central pillar of Western basement in M. M. II *b*.

The slabbing in the Western of the two spaces stands in relation to a central gypsum block[2] (see Fig. 9), which shows, indeed, traces of the ledge on which the edge of the pavement here rested. This block clearly belonged to a central pillar and marks a permanent feature of this basement chamber though, for better security, this supporting pier was in the succeeding age linked to the South wall. We may deduce from this, as shown in the Plan (at the end of Volume II), that there was here an upper chamber with a single column.

Exceptional evidences of stratification in 'Room of Knobbed Pithos'.

A valuable commentary on what may be regarded as the M. M. II *b* arrangement of this basement region was supplied by a discovery made during the very elaborate supplementary investigations of 1928. The small cell-like space bordering this central basement chamber on the West, and known from the principal object that it contained as the 'Room of the Knobbed Pithos', to which access was later gained by an opening in the East wall, was found to have had an earlier opening on its South side (see Fig. 9), corresponding with a floor-level of the same date as the M. M. II *b* pavement of the Central Chamber, though differently constructed. The opening itself gave access to a small Magazine with a plaster floor at the same level, the latest sherds under the intact Eastern section of which were of the fully developed M. M. II class. But a contemporary slab fitting on to this found in the opening itself and protruding over the inner cell in an irregular fashion had considerable significance. It clearly belonged to a small patch of polygonal pavement of the familiar 'mosaiko' class, formed, as in this instance, of iron-stone (ἀμυγδαλόλιθος) and typical of a considerable restoration of the building that took place towards the close of M. M. II. The chronological data here corresponded with previous evidence, and this iron-stone slabbing is seen to mark the level where the 'Knobbed pithos', dating from the earliest phase of that Period, had been truncated.

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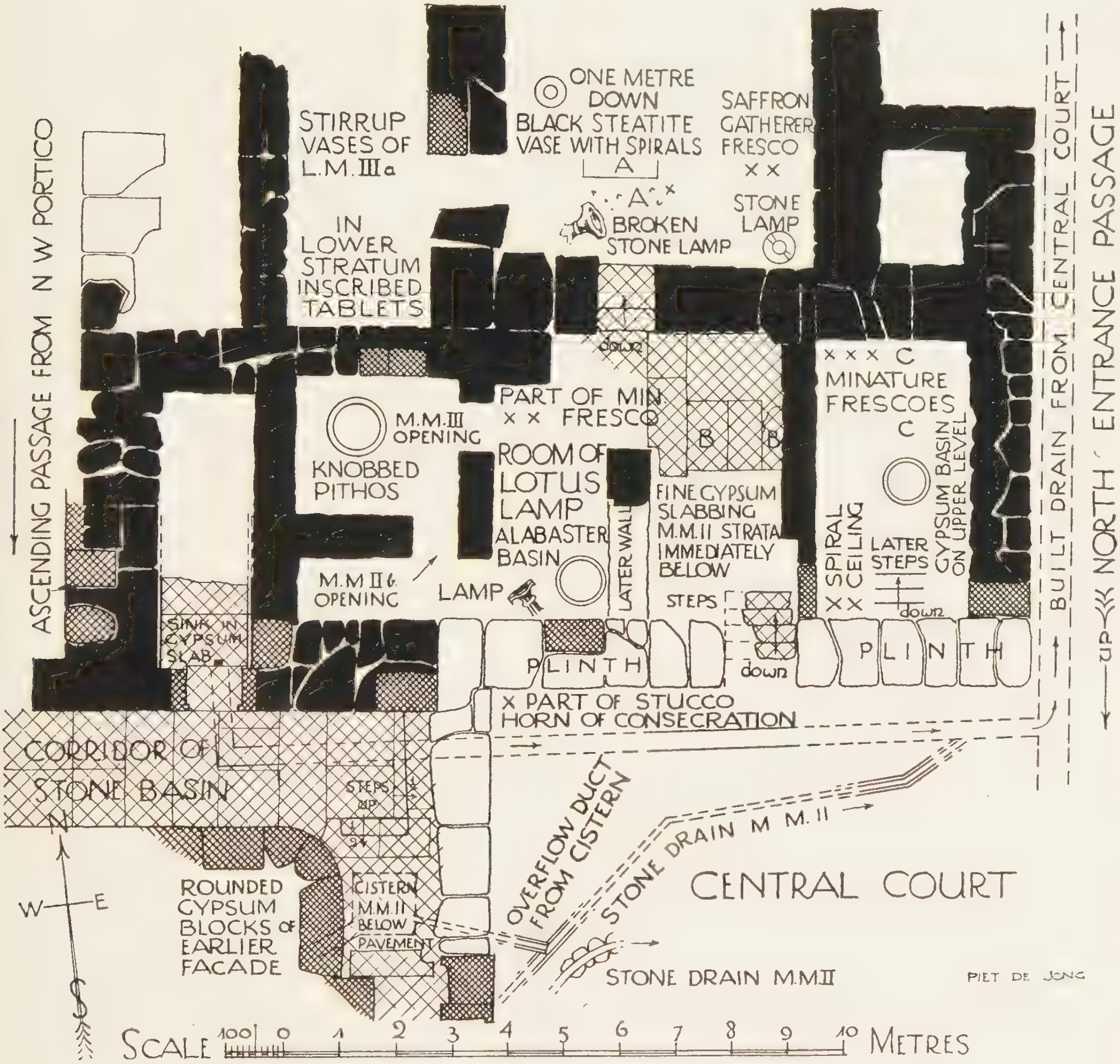
[1] The breadth of the slabs was 75 cm., but at least 10 cm. of this would have been covered over.

[2] This block, as is shown by two dowel-holes on its W. side, had been taken from the earlier Palace (M. M. II *a*). The cutting in its E. side which served to receive the slabbing of the later floor (M. M. II *b*) may therefore have been originally made in an earlier connexion.


ASCENDING PASSAGE FROM N W PORTICO
STIRRUP VASES OF L.M. IIIa
IN LOWER STRATUM INSCRIBED TABLETS
ONE METRE DOWN BLACK STEATITE VASE WITH SPIRALS
A
A
BROKEN STONE LAMP
SAFFRON GATHERER FRESCO
× ×
STONE LAMP
down
PART OF MIN FRESCO
× ×
M.M.III OPENING
KNOBBED PITHOS
ROOM OF LOTUS LAMP
ALABASTER BASIN
LATER WALL
FINE GYPSUM SLABBING M.M.II STRATA IMMEDIATELY BELOW
B
B
× × × C
MINATURE FRESCOES
C
× SPIRAL CEILING ××
LATER STEPS
down
GYPSUM BASIN ON UPPER LEVEL
BUILT DRAIN FROM CENTRAL COURT
UP NORTH ' ENTRANCE PASSAGE
M.M.II b OPENING
LAMP
STEPS
down
SINK IN GYPSUM SLAB
PLINTH
PLINTH
× PART OF STUCCO HORN OF CONSECRATION
CORRIDOR OF STONE BASIN
STEPS UP
N
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ROUNDED GYPSUM BLOCKS OF EARLIER FACADE
CISTERN M.M.II BELOW PAVEMENT
OVERFLOW DUCT FROM CISTERN
STONE DRAIN M M.II
CENTRAL COURT
STONE DRAIN M.M.II
PIET DE JONG
SCALE 100 0 1 2 3 4 5 6 7 8 9 10 METRES

Fig. 9. Part of North-West 'Insula', showing Position of Principal Finds.

This series of levels brought to light in this small chamber affords one of the best pieces of stratification to be found on the whole of the Palace site. An ideal sketch of this is given in Fig. 12, p. 24, below.

The latest level here reached of post-seismic M. M. III *b* date extended over this whole area and, from the character of the relics found on it, must have remained in use to the very end of the Palace and the closing days of L. M. II. The same continuity is observable in many of the 'West Magazines', where late 'Medallion pithoi' stand side by side with L. M. I and L. M. II jars.

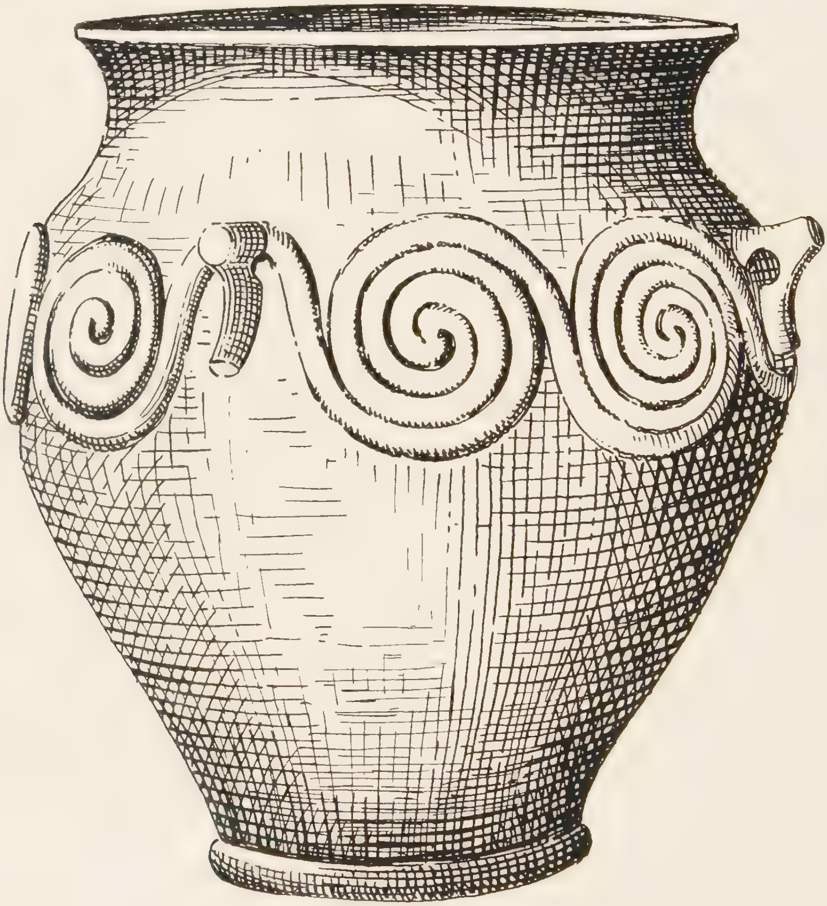

Fig. 10. Black Steatite Jar from Early Floor of Inner Basement.

Stratification in area N. of 'Pillar Basement'.

In the space, again, immmediately North of the room with the central pillar—which lies at a somewhat lower level owing to the slope of the ground and seems indeed to have been approached by two descending steps—slabs of gypsum also appear of the same fine alabaster-like quality, such as is characteristic of the earlier palatial stages. Here, too, a careful exploration of the material underlying the slabs[1] produced similar chronological results. In the inter-space, in this case only about 5 cm. wide, between the slabs and the earliest Palace floor-level of rough cement-covered blocks—immediately overlying the wall-tops of the Keep—the latest sherds were M. M. II and the deposit underlying a connected patch of 'tarazza' pavement repeated the same story.

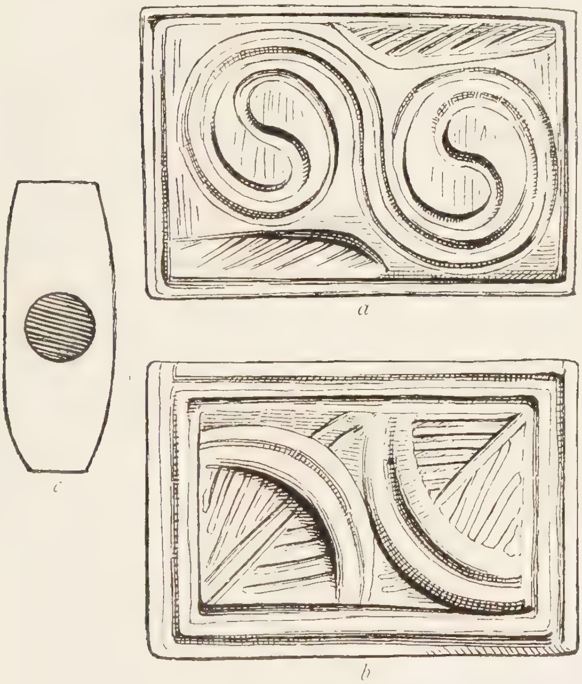

Fig. 11. *a*, *b*, *c*, Ivory Bead-seal from Knossos, M. M. I *a* ($\frac{2}{1}$).

This conclusion as to the date of the paved floor-level of this area has a special interest in relation to two discoveries here made, both apparently belonging to this level.

Large black steatite vessel with spiral reliefs.

One of these finds was a large black steatite vessel 48·5 cm. in height (Fig. 10) with a spiral decoration in bold relief. This spiral, as will be seen from its representation in Fig. 10, differed in two sections of circumference of the vase. On one side it is a simple coil. On the other side it presents a characteristic inner return, such as is frequent throughout the earlier phases of the Middle Minoan Age. It is seen already on the M. M. I *a* ivory bead-seal from Knossos, Fig. 11, probably of M. M. I *a* date.[2] It recurs on polychrome pottery of egg-shell type (M. M. II *a*),[3] and is found on jars of the earliest M. M. III fabric (*a*).[4] The jar itself has a somewhat archaic aspect.

'Saffron-Gatherer' fresco.

The other discovery, made near the S.E. corner of the room, consisted of the fragments of the fresco panel representing the naked figure of a boy gathering saffron flowers in a rocky landscape, described and illustrated in the first Volume of this work.[5] The unique bluish tint of the figure points to an Age when the Egyptian colour convention of deep red for males, and white for women, generally prevalent from the Third Middle Minoan Period onwards, had not yet been adopted. At the same time the colour scheme of the rocks, with their black and scarlet striations, corresponds with that of the great days of Cretan polychromy on vases, which does not extend beyond M. M. II. The latest investigations as to the floor-level on to which it had fallen corroborate the view that this remarkable fresco—doubtless part of a frieze above a high dado—which in its early characteristics stands apart from all known Minoan wall-paintings, is of exceptionally early date. Nor, indeed, does the fact that it was found in apparent connexion with a M. M. II *b* floor by any means exclude the possibility that it was executed at a somewhat earlier date. For it must always be borne in mind that, while small objects, such as vases resting on a floor, may be generally referred to the latest epoch when it was in use, frescoes on walls often survived many interior changes.

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[1] Supplementary researches of 1928.

[2] Found N.W. of the Palace site: drawn at the time but now untraceable. The 'tree' motive of E. M. III and M. M. I *a* seals appears on *b*.

[3] E. g. *P. of M.*, ii, Pt. I, Pl. IX c, 1–2.

[4] Seager, *Pachyammos*, Pl. VIII (xi. 1).

[5] *P. of M.*, i, pp. 265, 266, and Pl. IV.

Later floors with stone lamps and tablets of Class B.

The stone lamps found in this space (see below, Fig. 14, *a*, *b*, *c*) must be taken in connexion with a later floor-level—50 cm. above the earliest M. M. II layer—on which some inscribed tablets of Class B also came to light. In the space immediately West the pavement of this, consisting of clay with a plaster face, was better preserved, and on it lay a mass of much decayed tablets of the same kind. Twenty centimetres above this, again, was a clay floor, resting on which were numerous vessels belonging to the earlier phase of the 'Reoccupation' period (L. M. III *a*), including 'linked' or double pots, a 'cheese strainer', and stirrup vases, showing symmetrically decorative but degenerate octopuses, which at the time gave their name to the room. It was observable that these late remains did not extend to the contiguous spaces, a phenomenon frequently repeated and which illustrates the partial and sporadic character of the reoccupation.

L. M. III*a* floors above.

Basements bordering Central Court.

For the decorative remains of the Palace as restored after the seismic catastrophe towards the close of M. M. III the basement rooms above described, bordering the Central Court and South of the area that contained the 'Saffron-Gatherer', were specially productive. Some account has already been given of the earlier stratification of these, and of the subsequent rearrangement by which a central 'pillar-room' was formed, the Easternmost space being separated off by a dividing wall. There is considerable evidence to show that at the time of the great Restoration new plaster floors were laid down in both these basement rooms the surface of which was about half a metre above the earliest Middle Minoan floor, itself immediately overlying the wall-tops of the Keep.

The mark of this clay and plaster floor is clearly seen on three sides of

Re-arrangement of supporting pier.

the limestone block that was now set above the original gypsum base of the central pillar already described,[1] and this was at the same time tied to the stout South boundary wall of the basement to give additional security to the central pier. This wall, since removed, was somewhat skewly and badly built, as was not unfrequently the case with basement work executed at this epoch.

Other traces of the same late plaster floor about half a metre above the level of the M. M. II *b* gypsum slabbing are visible on the walls of the Central basement chamber, notably on that to the South.

Further evidence supplied by 'Room of Knobbed Pithos'.

Apart from the characters of certain objects found on this floor-level and marking it as a work of the New Era, crucial evidence as to its relative place was supplied by the small adjoining space containing the 'knobbed pithos' of the exceptional stratification of which something has been already said[2] (see Fig. 12). We have already seen that the pithos itself rested on the rough limestone slabs of a floor representing the earliest palatial stage and laid immediately on the upper part of the inner walling of the 'Keep'. At that time the space was a mere cell, walled wholly round, and accessible only, like the basement rooms of many early houses, by means of a ladder. At a later date an opening was made at a higher level in the South wall of the cell, and the iron-stone slabs of a 'mosaiko' pavement of the M. M. II *b* class were laid down, the pithos itself being cut off at its level about 40 cm. above its base (see the ideal sketch, Fig. 12). Next, with its surface 15 cm. higher, or 55 cm. above the original 'kalderim', there are well-marked traces on the borders of the cell of a clay and plaster floor 10 cm. thick associated with roughly made cups and small vessels, found in part standing on this level, of typical M. M. III *a* fabric.

M. M. III *a* pottery: below later pavement.

The outline of some of these is sketched in Fig. 12. It is noteworthy that the cup, *e*. showing a brown band on a buff slip, resembles in shape and height—10·5 cm.—the higher of the 'ink-written' cups of the Linear Class A,[3] from the deposit—clearly of M.M. III *a* date—found on the South-East Palace border. Its base, too, is pinched in in the same way. With these smaller vessels was part of the rim of a jar presenting white spirals on a blackish or red-brown ground of which the section is given in Fig. 12, *f*.

This floor with the pottery upon it was in turn earthed under and, at a time when the deposit within the cell was 15 centimetres higher—or about

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[1] See above, p. 18.

[2] See Vol. i, pp. 234, 235 and Fig. 177. The results there shown were incomplete, more vessels being brought out along the edge of the chamber by the subsequent exploration.

[3] *P. of M.*, i, p. 588, Fig. 431, *a*, and cf. p. 613, Fig. 450.

70 cm. above its original floor,—a new opening was made for it, this time in its East wall, and communicating with the Central Basement room. The

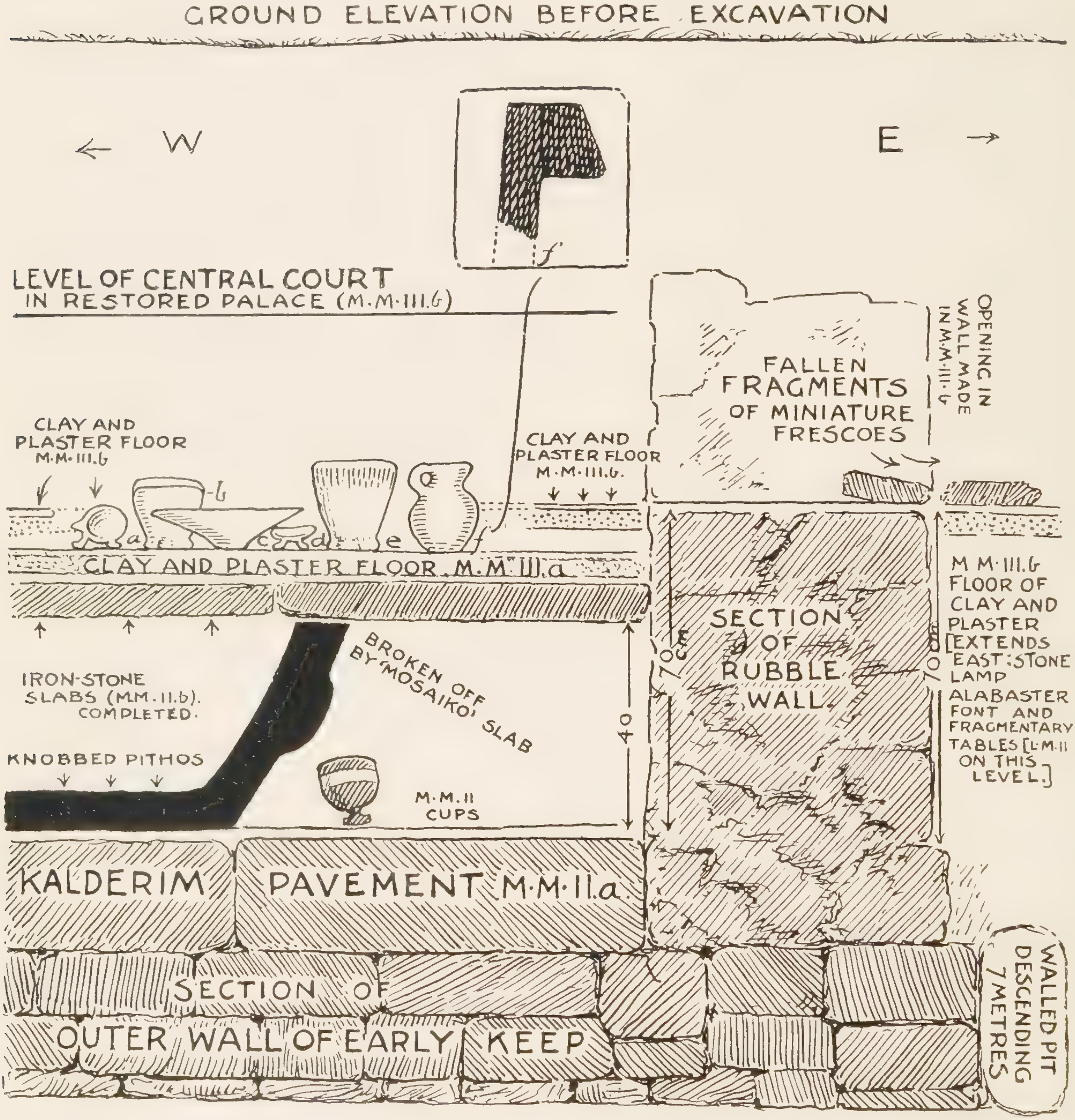
GROUND ELEVATION BEFORE EXCAVATION
← W
E →
f
LEVEL OF CENTRAL COURT IN RESTORED PALACE (M·M·III.b)
OPENING IN WALL MADE IN M·M·III·b
FALLEN FRAGMENTS OF MINIATURE FRESCOES
CLAY AND PLASTER FLOOR M·M·III·b
CLAY AND PLASTER FLOOR M·M·III·b
a
b
c
d
e
CLAY AND PLASTER FLOOR M·M·III.a
M M·III·b FLOOR OF CLAY AND PLASTER [EXTENDS EAST: STONE LAMP ALABASTER FONT AND FRAGMENTARY TABLES [L·M·II ON THIS LEVEL.]
SECTION OF RUBBLE WALL
70 c
70 c
40
BROKEN OFF BY 'MOSAIKO' SLAB
IRON-STONE SLABS (M.M.II.b). COMPLETED.
KNOBBED PITHOS
M·M·II CUPS
KALDERIM
PAVEMENT M·M·II.a
SECTION OF OUTER WALL OF EARLY KEEP
WALLED PIT DESCENDING 7 METRES

Fig. 12. Diagrammatic Section of East Part of 'Room of Knobbed Pithos', etc.

level of this plaster floor is thus shown to correspond with the M. M. III *b* stage, in all probability its post-seismic stage, contemporary with the great restoration of the Palace.

The threshold of this new opening lay at the same level as that of the

Extension of M. M. III *b* floor.

later plaster floor which has left its traces so clearly on its central pier and which corresponded with a floor-level that had a general extension throughout these basements in the restored building. It is of special interest to note, moreover, that, on the actual threshold of the new opening corresponding with this M. M. III *b* floor, there lay some fragments of the Miniature frescoes, found elsewhere among the deposits on this floor-level.

Continuous use of this floor in restored Palace.

It will be seen that the stratigraphic data afforded by the remains in the neighbouring cell fit in well with the relative place of this widely extended floor-level. It is definitely shown to be later in date than the earlier M. M. III phase. On the other hand, its association with some fragmentary inscribed tablets of the Linear Script B indicates a long period of use. The three rearranged gypsum steps corresponding with a gap in the plinth on the borders of the later Central Court stood in relation to this floor-level, and close to these the remains of the 'Spiral Ceiling' had been deposited on it.

Miniature Frescoes and 'Spiral Ceiling' fallen on this level.

These steps led down to the threshold level, continuous with this floor, of an opening through the wall of division—dating, as we have seen, from M.M. II *b*—between the Central and Eastern basement space, and conforming at a higher level with an earlier arrangement.[1] The floor as continued in this Eastern basement was of the same clay and plaster formation, and it was, as will be shown, on the surface of this that the bulk of the fragments of the Miniature Frescoes and of the Spiral Ceiling came to light.

Fonts and Lamps of Ritual Use.

Stone basins probably for ritual sprinkling.

Fragments of a L. M. II amphora of the finest 'Palace Style' occurred near the S.E. corner of the room and, in a central position, a good deal decayed, but with its base resting on the plaster floor, was a font-like basin of alabaster or fine gypsum of the kind already referred to.[2] Another similar basin of the same material, also a good deal disintegrated, was found *in situ* in the West section of the adjoining basement.

The best example of these basins, from its good preservation, came to light—obviously removed from its original place—in the neighbouring corridor named after it (Fig. 13). It is finely cut out of a kind of purple gypsum much in vogue at the beginning of the New Era, to which it may be presumed to have belonged. It was about the same size as the other similar basins, the dimensions being 90 centimetres in diameter and 20 cm. in height.

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[1] The threshold of this opening was finished off on the East side by a re-used gypsum block, showing a dowel-hole, set up sideways on the threshold of the earlier M. M. II *b* opening.

[2] See above, p. 9.

The close resemblance of the material to that of the fine 'lotus lamp' found beside the alabaster basin of the central basement chamber suggests that it originally belonged to the same area.

The recurrence of these font-like basins in this basement region bordering the North-West angle of the Central Court is itself a suggestive circumstance. Though the old 'Lustral Basin' and 'Initiatory Area' connected with the North-West Portico had ceased to function, and the entrance itself was narrowed, a certain number of votaries may have still used the ramp passage on this side on their way to the Central Palace Sanctuary and would have entered the Court at a point where these basements with the font-like receptacles were handy. The same may be said—especially with regard to the Eastern basement—in the case of those entering the Court by the North Entrance Passage.

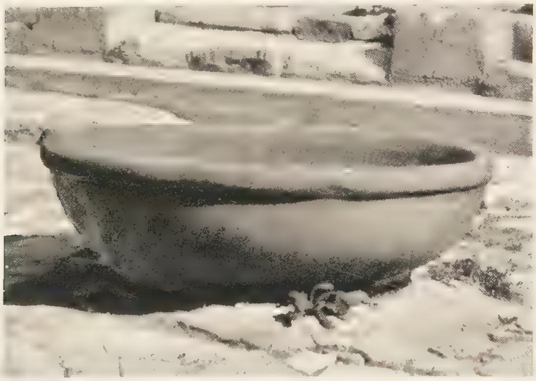

FIG. 13. LARGE BASIN OR 'FONT' OF PURPLE GYPSUM.

Numerous stone lamps on later basement floor.

That there was at most a 'dim religious light' in these basement rooms appears from the occurrence on the floor-level answering to the great Restoration of a series of stone lamps. Of these the finest was the 'lotus' lamp, of purple gypsum, the upper part of which with its quatrefoil flutings, lotus buds, and flowers and foliated rim was found beside the alabaster font of the central crypt (Fig. 14, *a* 1, *a* 2). Two others of steatite were found in the adjoining space North (see Plan, Fig. 9). One, Fig. 14, *b*, also showed a quatrefoil pedestal. The other, with only a low base, was surrounded with sea-snails in relief, a recurring type.[1] Though this bordered on the ascending Entrance Passage, it is probable that for obvious reasons it, like the basement West of it, only received a partial light, perhaps through the doorway, from the Central Court.

From the fine character of several of the stone lamps found in these basement chambers, as well as their recurrence, it is evident that there was something more than a casual and intermittent need for their illumination, such as would have been the case had they been mere store-rooms. It seems to be a reasonable explanation that they were used for religious ceremonies connected with the stone 'fonts'. The identification of 'holy-water sprinklers' akin to the *aspergilla* of Roman Pontifices and to those used by the early Christian Church in a series of Minoan representations[1] has

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[1] The reliefs in this case being a good deal worn, another specimen of this class (from the Royal Tomb at Isopata) is given in Fig. 14, *c*.

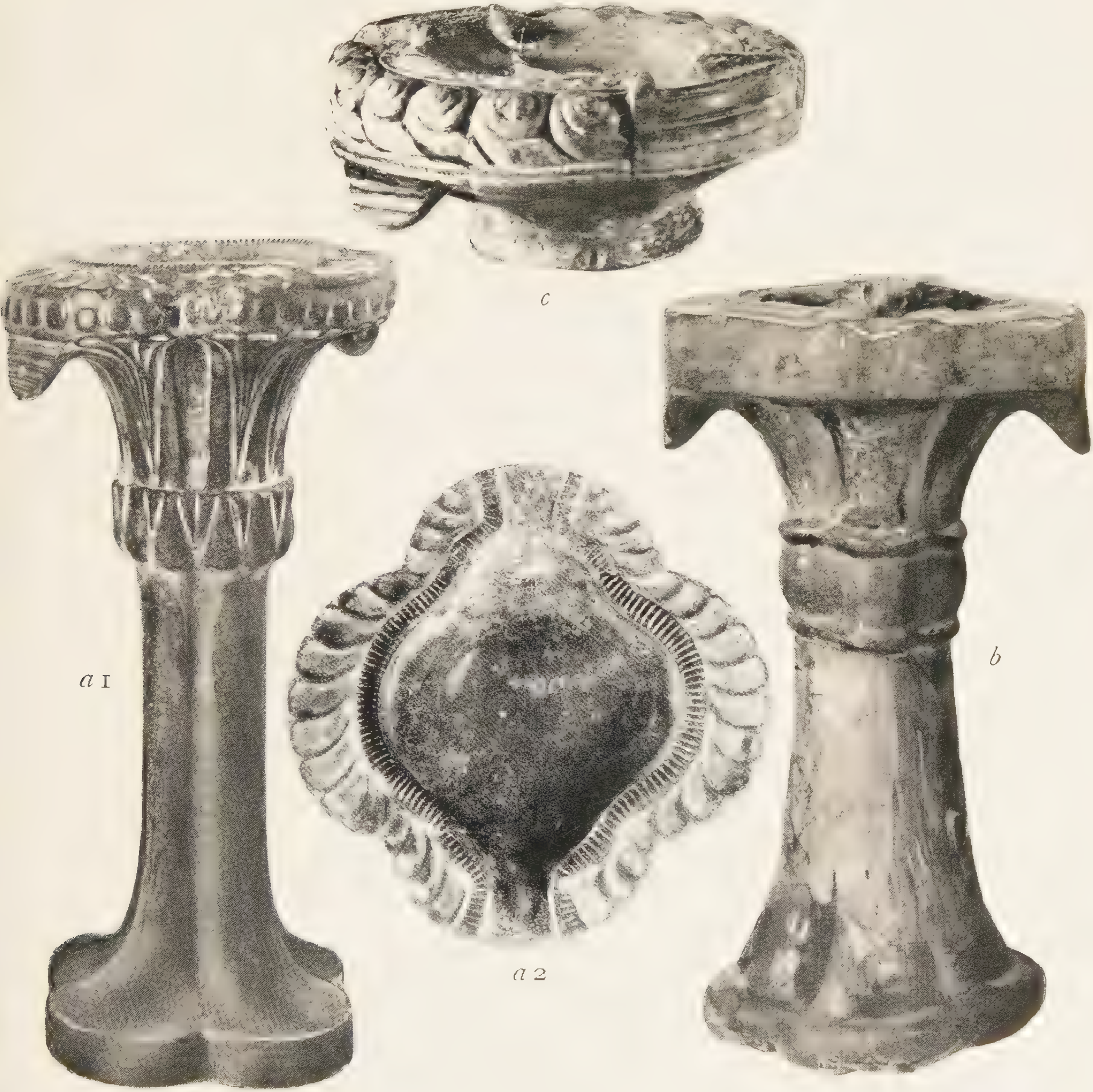

Fig. 14. Stone Lamps: *a* 1, 2, Purple Gypsum; *b*, Black Steatite; *c*, Purple Gypsum (see *Arch.* lix, p. 150, Fig. 127).

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[1] See Vol. ii, Pt. II, p. 792 seqq.

certainly added to the probability of such a conclusion. That some kind of 'baptism' with the aid of such a stone basin may have entered into the lustral ceremonies *ex hypothesi* performed in the sunken areas, such as that to the North-West of the Palace, is probable enough and might help to account for their bath-room-like form. It is at the same time equally fitting that such a ritual sprinkling should have been carried out in the crypts—one of which was a kind of 'pillar-room'—where the stone basins were found.

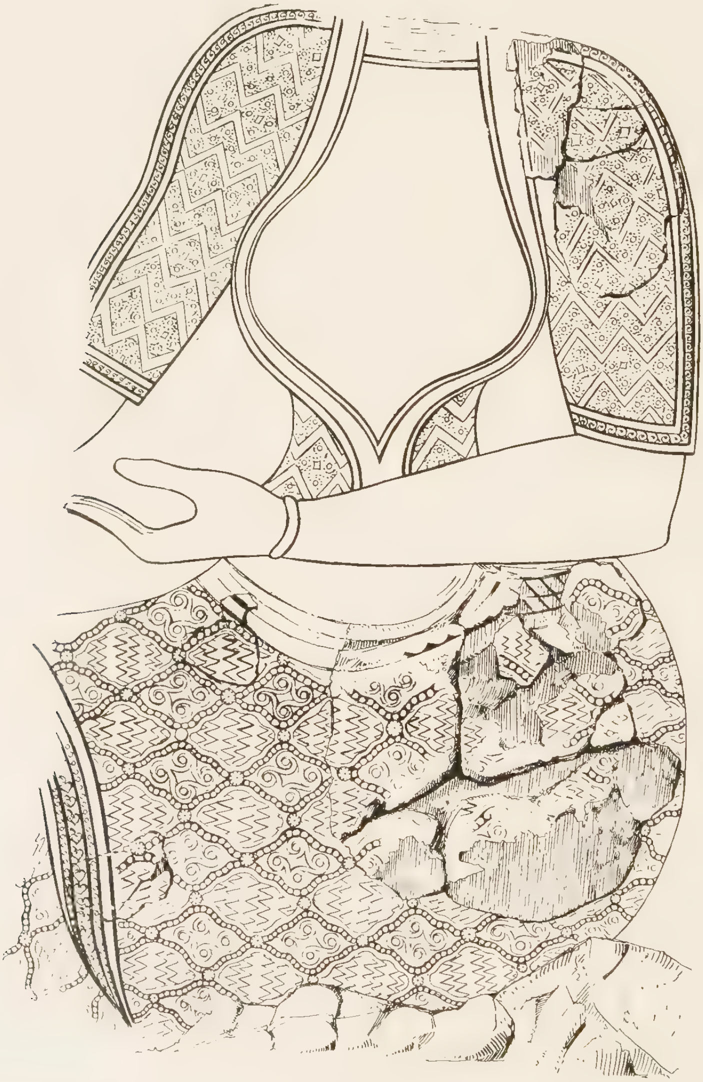

Fig. 15 a. Restoration of Painted Plaster Relief in Knossian Style from Pseira (see p. 38 and cf. p. 45, Fig. 27).

§ 69. DISCOVERY OF 'SPIRAL CEILING' AND 'MINIATURE FRESCOES' DERIVED FROM CORNER SANCTUARY—DATE AND COMPARATIVE MATERIALS; EMBROIDERED DESIGNS ON HOLY ROBE.

Small corner Sanctuary containing remains of 'Spiral Ceiling' and Miniature Frescoes; These fallen from Upper Chamber; The 'Spiral Ceiling'—Egyptian analogies; Parallel from Tomb of Senmut; Mature L. M. I decorative style; The 'Miniature Frescoes'—triple group; Chronological materials; Fragments found on M. M. III floor—law governing discoveries of fresco remains; M. M. III date of frescoes ascertained; Fragments from Thirteenth Magazine; Characteristic specimen beneath base-blocks of later façade; Fragment from 'Ivory Deposit'; True 'Miniature' style obsolete by L. M. I; M. M. III date of 'Miniature' fragments from Tylissos; Boxers as on 'rhyton'—unique bronze vessel; Frescoes from 'Ramp House' at Mycenae; Fragments from 'Threshing-Floor heap'; Miniature designs from embroideries on female robe; Embossed bands; Comparison with painted reliefs from Pseira; Pairs of flutes; Flutes in sacrificial scene on H. Triada sarcophagus; Bull's head trophy between pair of Sphinxes; Embroidered swallows on robe of Melian fresco; 'Miniature' fragments of Threshing-floor heap, perhaps from robe of Goddess; Commanding position of Shrine, at angle of Central Court and N. Entrance; Its small dimensions; Miniature Frescoes set over gypsum dadoes, on line of vision.

Small corner Sanctuary

THE fact that the Western of the two larger basement chambers described in the preceding Section was provided, according to its original structure, with a central pier leads to the conclusion (adopted by Mr. W. G. Newton in the Restored Plan C)[1] that there had been a room with a central column above it, such as elsewhere seems to have been the arrangement above pillar crypts. We may even assign to it a certain religious destination.

This square, presumably columnar, chamber, opened by its S.W. angle into a smaller oblong space, having, apparently, a cell-like recess at its Northern end. Despite its narrow dimensions, this structure held one of the most conspicuous positions in the whole of the building. It occupied, in fact, the corner space at the point where the Northern Entrance Passage entered the Central Court, and, standing as it did well above the ascending gangway, it would have received light from that side as well as from the Court.

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[1] At the end of Vol. ii.

Containing 'Spiral Ceiling' and 'Miniature Frescoes'.

From the evidence of the finds made on the basement floors it clearly appears that the principal series of Miniature Frescoes which embody such an unique development of Minoan Art were derived from this little chamber. The bulk of them had fallen on the later floor belonging to the Restored Palace, in the Northern Section of the basement underlying it. Some other fragments occurred in company with the fallen remains of a painted stucco ceiling showing spirals and rosettes on the same floor-level, and in the South-West corner of the same area, beside the steps leading down to it (see Plan, Fig. 9). In the central basement chamber beyond, only a few isolated fragments were found, but two fair-sized pieces lay on the same M. M. III *b* level on the actual threshold of the opening at that time made into the walled cell containing the 'Knobbed pithos'. Apart from the strong presumption that these frescoes had decorated the walls of an upper chamber, their sporadic distribution in more than one basement may be taken as decisive evidence that this was the case.

Ceiling and frescoes fallen from upper chamber.

The Spiral Ceiling.

The Spiral Ceiling.

It would, in the same way, be quite unreasonable to suppose that the painted stucco ceiling of which remains were found on the floor of the Eastern compartment had belonged to the basement itself. It may itself have covered only a small space, but its whole character proclaims that it belonged, like the associated Miniature Frescoes, to a more important structure connected with the *piano nobile* of this Palace angle. The spiral reliefs themselves with their central rosettes—repeated in the interstices—belong to a class of ceiling decoration that reflects the fashions of contemporary Egypt. A parallel type of a simpler character, with rosettes only in the intervals and presenting spirals on a larger scale, occurred in connexion with the high reliefs derived from the decoration of what was once the great East Hall of the Palace.

Egyptian analogies.

The highly decorative pattern of the present example is remarkable for the quatrefoil medallions with large rosettes in their centres attached at intervals to the surface. The splendid effect of this ceiling is well brought out in the Coloured Plate XV[1]: the divergent coils in relief are white, the rosettes red and yellow, outlined in black on a brilliant 'kyanos' blue ground. It is probable that the pounded glass used for this was imported from Egypt, and the ceiling, like its fellow from the East Hall, and the fine spiral and papyrus pattern from the 'Queen's Megaron' illustrated

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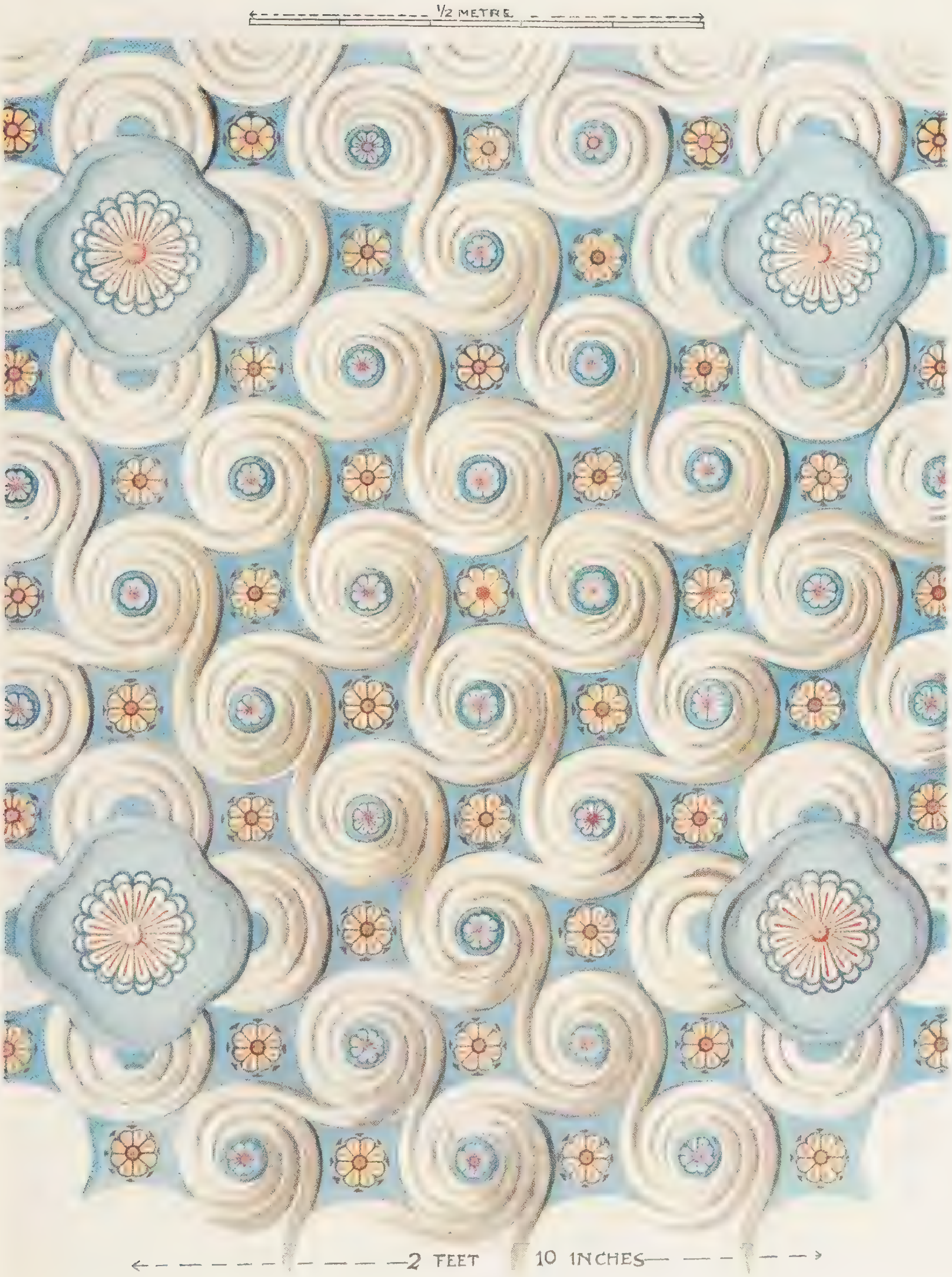
[1] From the restored drawing by Mr. Theodore Fyfe. See, too, his *Painted Plaster Decoration, R.I.B.A. Journ.*, Pl. I, and pp. 118, 119.

PLATE XV


½ METRE
2 FEET 10 INCHES

CEILING PATTERN IN PAINTED STUCCO RELIEF

Parallel from tomb of Senmut.

below,[1] is evidently copied from an Egyptian class of which fine examples have been found belonging to the early part of the Eighteenth Dynasty.[2] It is to be observed that a near parallel, though of somewhat simpler type, occurs in the tomb of Senmut,[3] the wall-paintings on which supply us with some of the earliest illustrations of the tributaries from Keftiu.[4] As separate features both the spirals and rosettes of similar forms occur on the cups of Vapheio type that they bear as offerings. These fit in again with the widespread designs on friezes of spirals and rosettes much in vogue in the 'Domestic Quarter' and in all probability belonging, as pointed out below,[5] to a redecoration of that quarter of the building about the close of the earlier phase of the First Late Minoan Period.

Mature L. M. I decorative style.

This conclusion would make the execution of the painted ceiling distinctly later in date—as may well have been the case—than that of the Miniature Frescoes on the walls, fragments of which had fallen on the floor of the same chamber. It is at any rate clear that at the epoch when it was designed the influence of Egypt under the New Kingdom was beginning to make itself felt. As has been already shown, the floor-level on which these remains came to light presented deposits covering a considerable length of time and ranging, indeed, from the close of M. M. III to that of L. M. II.

The Miniature Frescoes and their Relative Date.

The Miniature Frescoes triple group.

As a class, the Miniature Frescoes themselves fall into several groups. A group found in a different connexion, in which small designs are incorporated in the larger subject of a 'Holy Robe', will be described at the end of this Section.[6] Another group, of which some specimens occurred in the structure referred to above, though it has the greatest claim to represent a historic tradition, is unfortunately the most scantily preserved. It consists of throngs of light-armed warriors for the most part hurling javelins upwards, clearly at the defenders of some stronghold or fenced City, of the architectural features of which we have only a few indications. The subject, however, is of the greatest interest both in its relation to the 'Town Mosaic' of an earlier age and to the more or less contemporary silver 'rhyton' from the Fourth Shaft Grave at Mycenae dealt with below in this relation.

In contrast to this the other scenes, of which more is preserved, illustrate festal celebrations in honour of the Minoan Goddess. One of these, indeed, shows her miniature columnar shrine between grand stands crowded with spectators, again of both sexes, looking out on what in all probability were the sports of the bull-ring in an arena beyond. The theme of the other composition is 'The Sacred Grove and Dance' in which standing men and seated women look down from under the olive-trees on gaily dressed dancers within a walled space, in which we may indeed recognize the 'Choros of Ariadnê'.

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[1] See below, pp. 371–4, and Fig. 247.

[2] E. g. Wilkinson, *Ancient Egyptians* (1878 ed.), ii, Pl. VIII, 31 (facing p. 363).

[3] G. Jequier, *Décoration égyptienne*, Pl. XXI.

[4] See *P. of M.*, ii, Pt. II, p. 737, Fig. 470, &c.

[5] See below, p. 281, &c.

[6] See p. 40 seqq.

Chronological materials.

How far, it may be asked, do the find circumstances of these Miniature Frescoes throw a light on the chronological place of this style of wall-painting?

Fragments found on M. M. III floor.

The evidence as to the position in which they were found is, so far as it goes, consistent and satisfactory. The fragments lay on the clay and plaster floor-level extending throughout these basements, the bulk occurring within their Easternmost compartment, but some scattered pieces on the floor of the central room, and two on the actual threshold of the little cell named from the 'Knobbed pithos'. At this point the stratigraphic data are quite clear. The surface of the floor-level on which the Miniature fragments were there found is 15 centimetres above that on which small vessels and other pottery rested, representing the earlier phase (*a*) of M. M. III (see above, Fig. 12). That the same basement level on which the Miniature Frescoes rested continued in use to the last days of the restored Palace may be gathered from the sparse occurrence on it of parts of clay tablets belonging to the Linear Class B. But, as one now realizes, this does not by any means involve the conclusion that these frescoes belonged to that late epoch—though it was natural, at the time of their first discovery, in view of the almost rococo appearance of the seated ladies, their elaborate toilettes and highly polite gestures, to assume that they represented the most advanced and almost decadent stage of Palace life.

Law governing discoveries of fresco remains.

The invariable law, repeatedly illustrated in the course of the excavation of the Knossian Palace, is that, while the smaller clay vessels and other lesser objects found on a floor-level belong to the last period of its use, painted stucco decoration on the walls or fallen from them may go back to a considerably earlier time. They may even belong to an earlier epoch than the floor-level on which they lay.

M. M. III date of frescoes ascertained.

Thus in the present case, though it is clear that the frescoes were not later than the last L. M. II elements on the floor, and were probably at least as old as the floor itself, it is impossible to arrive at more than a presumption. The plaster floor, as there is good reason to believe, dates from the restoration of the Palace late in M. M. III *b* and the wall decoration may have been of the same date. But the possibility always remains that it dates from the time of a M. M. III *a* floor.

Of the relatively early date of this Miniature class—at any rate well within the limits of M. M. III—we have, however, some quite conclusive evidence.

Fragments from Thirteenth Magazine.

The painted stucco fragments found between the 'Kasella' floors in the Thirteenth Magazine have been already cited as giving evidence of early date. They were covered by the floors of more superficial cists at an epoch which in view of our present knowledge must be taken to correspond with the time of the great restoration after the seismic catastrophe towards the end of M. M. III, and belong therefore to the pre-seismic stage of that Period. But these, it has been shown, included pieces depicting the crowded heads of male spectators, above a wall, like those of the Miniature Frescoes, slightly larger in scale but executed in the same style, and by means of the same artistic 'shorthand' and, in fact, inseparable from those of the present group (Fig. 15 B).[1]

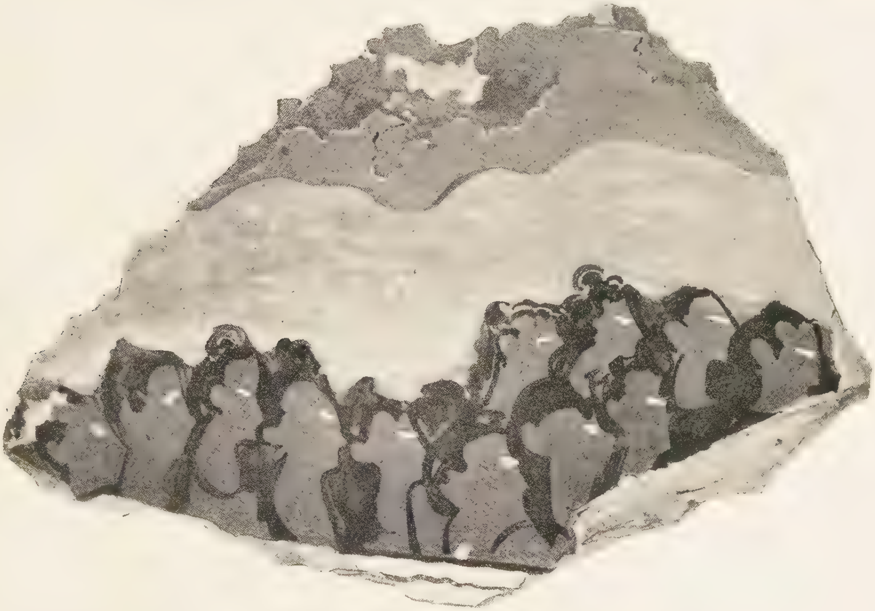

Fig. 15 b. Painted Stucco Fragment showing Crowds of Spectators from below *Kasella* Floor of Thirteenth Magazine.

Characteristic specimen beneath base-block of later façade.

A minute but striking piece of evidence was acquired, moreover, by the very careful analyses carried out in 1925 and 1926 of untouched elements beneath the later West façade of the Central Court.[2] The latest sherds there found showed that the ceramic contents, like those found elsewhere under the walls of the restored building, did not come down beyond the later phase (*b*) of the M. M. III Period.[1] There was no intrusion, indeed, of anything that could be ascribed even to the beginning of the First Late Minoan Period. But among the sherds thus defined there occurred—under the second base-slab near the S.W. corner of the Court[2]—a small fragment of a miniature stucco painting, showing the stepped outer edge of an entablature, with impressed thread lines and disk such as might well have belonged to the same deposit as the 'Temple Fresco'. A reproduction of it by Monsieur E. Gilliéron, fils, is given in Fig. 16.

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[1] Repeated from Vol. i, p. 527, Fig. 384.

[2] See Vol. i, pp. 442, 443.

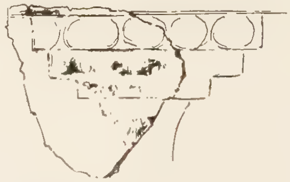

FIG. 16. MINIATURE FRAGMENT FROM UNDER BASE-SLAB.

Fragment from 'Ivory Deposit'.

A further important confirmation of these stratigraphic results was supplied by some exquisite fragments of Miniature Fresco described below[3], depicting part of a Double-Axe shrine and of a bull, found in the 'Ivory Deposit' of the Domestic Quarter, the date of which is shown by the ceramic evidence to go well back within the limits of M. M. III.[4]

It will be seen from the evidences above referred to that cogent proof exists of the Miniature style of fresco painting having been fully developed by the early part at least of M. M. III *b*. On the other hand, the fact that the later M. M. III style was still prevalent in the early days of the restored Palace makes it quite possible that those who continued to manufacture pottery of the older class may in the same way have adhered to the practice of Miniature painting in decorating the walls. It is on the whole most probable, in view of the position occupied by their fallen remnants, that the 'Temple Fresco' and its companion pieces date from the early days of the restored Palace.

True miniature style obsolete by L. M. I.

What, however, is certain is that there are no examples at Knossos of fresco design of the true 'Miniature' class, with its multiplicity of small figures and 'shorthand' technique, that can be attributed to the Late Minoan Age. The compositions of the concluding Palace periods show larger figures, more sparsely distributed, as we see in the case, for instance, of 'Taureador' and 'Camp-stool Frescoes'. The seated Miniature ladies associated with the groups above described, if in an upright position, would be about 10 centimetres in height, the restored figure on the balcony (Fig. 35, below) is 0·8 cm.: those standing on the piers only 0·55 though we can hardly assume that this was an attempt at perspective. The female

[1] *P. of M.*, ii, Pt. II, pp. 802, 803.

[2] See test 17 (1925): revised, 1926.

[3] See below, p. 207 seqq.

[4] See below, pp. 402, 403.

Taureador, on the other hand illustrated below[1], is 42 cm. high or at least four times as large as the Miniatures, and the figures seated on the camp-stools would work out to about the same scale.

M. M. III date of 'Miniature' fragments from Tylissos.

Such Cretan evidence as we possess of the true 'Miniature' frescoes outside the Palace at Knossos limits itself to some fragments found in

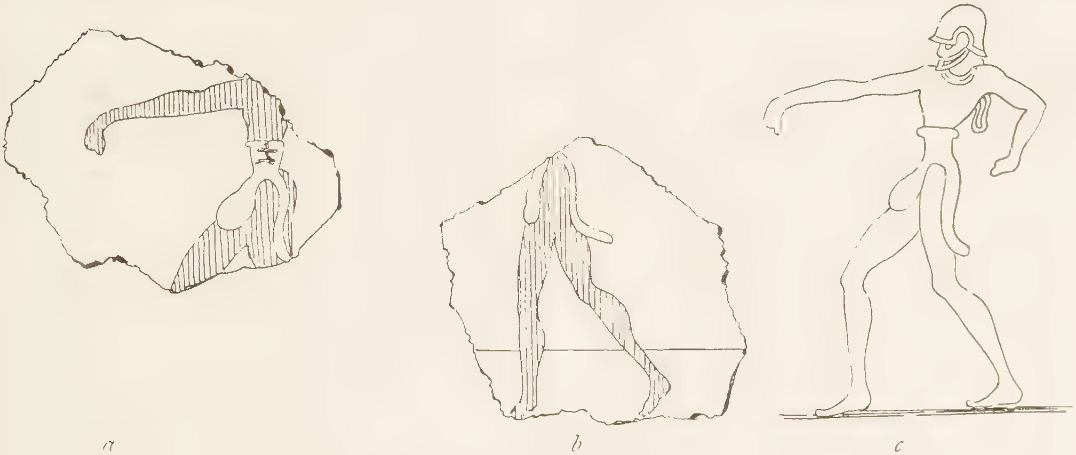

FIG. 17. *a*, *b*, BOXERS ON MINIATURE FRESCO, TYLISSOS; *c*, ON STEATITE RHYTON, HAGIA TRIADA.

Boxers as on rhyton.

a mansion of the not distant Tylissos. Specially important among these, from their close parallelism with a class of small reliefs, were parts of a row of boxers, advancing left[2] with a tree beyond, and all, it would appear, in the same characteristic attitude as those from the 'Boxer' rhyton found at Hagia Triada,[3] the figures on which, indeed, and that on the steatite relief and sealing from Knossos[4] make it possible to restore it (Fig. 17, *a*, *b*, *c*). All these parallel examples may be safely referred to the closing Middle Minoan Period, and the building in which these painted stucco remains occurred also dates from the same epoch.

Together with these were found pieces showing the skirts of a series of female figures and another on which is preserved the upper border of a crowd of male spectators (Fig. 18), some of whom raise their arms in the same way as those on a Knossian fresco where they are looking on a spectacle below. An architectural fragment found here (see p. 84, Fig. 47, below) may connect itself with the class of 'Siege' scenes described below. Another curious fragment (Fig. 19)[1] exhibits a large spouted vase, apparently of bronze, with a handle of unique form, surmounted by a white object resembling a tied package, while at the side hangs a skin vessel—such as are used for native cheese—here with a mammiform end.

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[1] See below, Coloured Pl. XXI facing p. 216.

[2] J. Hatzidakis, Τύλισσος Μινωική ('Αρχ. 'Εφ., 1912), Pl. XIX. Unfortunately the impress of guiding thread line has been reproduced in such a way as to look like a rope in front of Fig. 17, *a*.

[3] *P. of M.*, i, p. 690, Fig. 511; A. Mosso, *Escursioni nel Mediterraneo e gli Scavi di Creta* (ed. 2), p. 176, and Fig. 89; H. R. Hall, *Aegean Archaeology*, p. 60, Pl. XVI. See on the discovery F. Halbherr, *Rendiconti della R. Accad. dei Lincei*, vol. xiv (1905), p. 365 seqq. The helmet in Fig. 17, *c*, is restored from this. On the fragment of the steatite vessel from Knossos, however, the boxer's head is bare.

[4] *P. of M.*, i, p. 689, Figs. 509, 510.

Unique bronze. vessel.

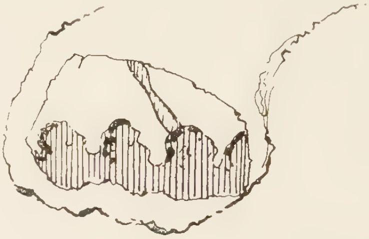

FIG. 18. PAINTED STUCCO FRAGMENT FROM TYLISSOS SHOWING PART OF UPPER ROW OF SPECTATORS, AS ON 'GRAND STAND' AT KNOSSOS.

Is it possible that we had here provisions for those engaged in the athletic contest—beer or wine, cheese, and perhaps a barley cake?

Frescoes from 'Ramp House', Mycenae.

Among frescoes that may be included in the 'Miniature' Class are those of the Votive tablet from Mycenae[2] and of the 'Ramp House'[3]. The latter, some of which have to do with the bull-ring, also include parts of the same group as that above described of women looking out through a window opening, the posts of which, in close conformity with the columnar shrine from the Thirteenth Magazine, show the blades of inserted double axes. The borders of these panels—where a white band is succeeded by a yellow band with red bars and a blue band with black—exactly correspond with that of the 'Temple Fresco', Here the figures answer to the Miniature scale: those of the 'Frieze of Warriors',[4] on the other hand from the Mycenae Megaron—a composition which may itself be safely placed well within the limits of L. M. I[4]—are about twice the scale of those seen on our Miniature panels.

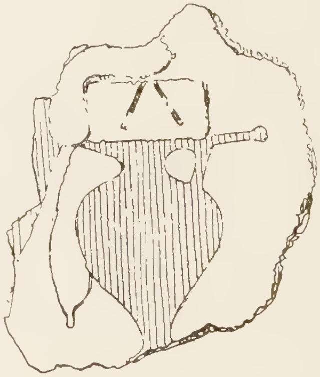

FIG. 19. MINIATURE FRAGMENT WITH VASE AND UNCERTAIN OBJECT: TYLISSOS.

Fragments from 'Threshing Floor Heap'.

The 'Temple Fresco' and the 'Sacred Grove and Dance' clearly stand in a religious relation. This conclusion is confirmed, moreover, by a re-

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[1] Hitherto unpublished. Drawn for me by Monsieur E. Gilliéron, fils. The vessel is coloured red.

[2] See below, p. 135, Fig. 88.

[3] Miss W. Lamb, *B. S. A.*, xxiv, pp. 191–4, and Pl. VII.

[4] Found by Tsountas in 1886; Rodenwaldt, *Ath. Mitth.*, 1922 and *Der Fries des Megarons*, &c.; *B. S. A.*, xxv (Miss W. Lamb), p. 164 seqq.: restored, Pl. XXVII.

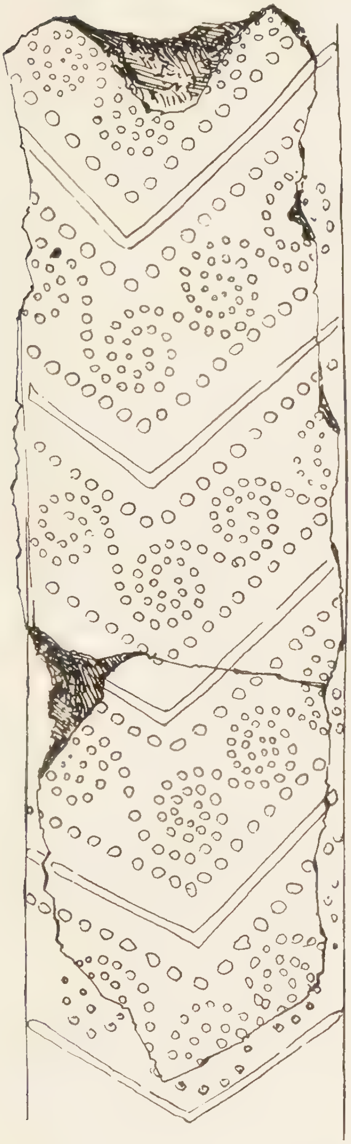

FIG. 20. EMBOSSED BAND ($\frac{3}{2}$).

markable group of fragments found in a large painted stucco deposit that came to light beneath a later threshing floor, about 15 metres North of the area where the 'Miniature Frescoes' were found.[1] As a series of these fragments evidently belonged to the same subject we may infer that they were in this case not mere *disjecta membra*, but derived from the borders of the region in which they were found and connected probably with the same group of sacral structures as those depicting the Grove and Temple.

Miniature Designs representing Embroideries on Dress.

Miniature designs from embroideries on female robe.

As being of an exceptional character, the group of fragments referred to is described in this place. The Miniatures in this case did not stand by themselves, but were subsidiary to larger figures, and a study of their remains established the conclusion that they represented the embroidered designs on the robes of one or more seated female figures, partly shown in slight relief. All the lines connected with miniature designs were slightly waved or curved, evidently belonging to the flounces or aprons of feminine attire.

Embossed bands.

Associated with these were sections of slightly embossed bands, 4·1 centimetres in diameter, of very hard plaster with a smooth surface, in one case coloured a brilliant azure blue, in the other a deep red and showing a series of chevrons and spirals dotted in with a thick white engobe (Fig. 20). The whole technique was of very fine execution and the chevron and spiral motive itself suggests an interesting parallel with that of the engaged columns of the 'Atreus' façade at Mycenae. These, however, as can be seen in the fragment, Fig. 21, and the restored sketch, Fig. 22, formed parts of the borders of ladies' jackets, and the variation in their ground colour is explained by the fact that we see here the spring of the shoulder outline of two figures.

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[1] This great fresco heap—or, rather heaps—lay for the most part under a later threshing floor (ἀλώνιον) above the area of the N.W. Portico. It contained miscellaneous pieces of painted stucco evidently stripped from the walls of the neighbouring Palace region in the course of their demolition to supply building materials elsewhere. That this took place at a late epoch may be gathered from two circumstances. Not only did the deposit itself contain some L. M. III fresco patterns, but it was superposed on wall-stumps of 'Reoccupation' date.

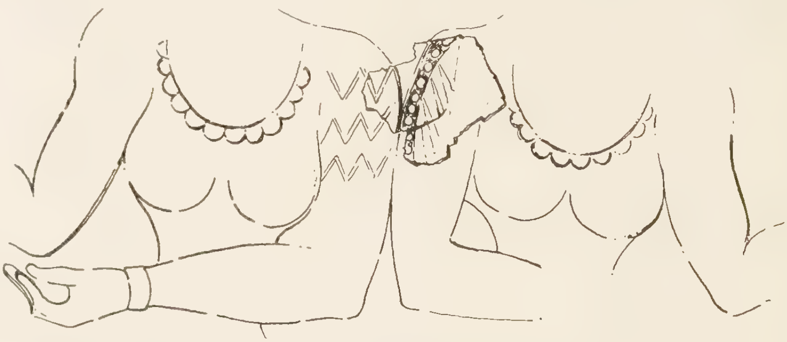

Fig. 22. Partial Restoration of the Figures to which the Fragment, Fig. 21, belongs. (Compare the Painted Stucco Relief from Knossos, Fig. 27, at the end of the Section.)

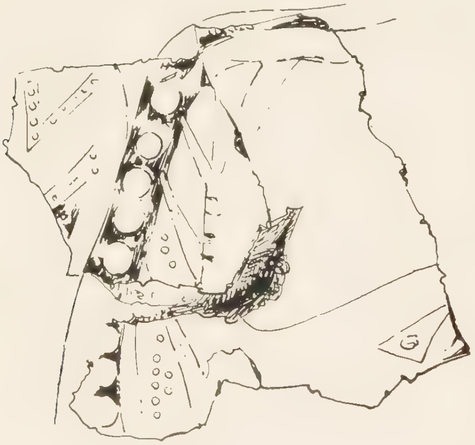

Fig. 21. Fresco Fragments of Two Female Figures.

Comparison with painted reliefs from Pseira.

We may conclude that there were here two female personages seated side by side after the manner of the 'Ladies in Blue'.

An even closer comparison both in style and date is suggested by the remains of two female figures found by Seager in one of the principal houses in the Island of Pseira,[1] where the rebuilding was carried out towards the close of M. M. III.[2] These were also partially executed in relief and the chevron pattern also forms in one case part of the sleeve decoration. A smaller fragment of a similar relief (Fig. 27, below)[3] was found at Knossos in the same heap as the above.

The miniature designs on the Knossian fragments under discussion seem, as already noted from the waving lines that contain them, to belong

[1] In Mr. Seager's original publication (*Excavations on the Island of Pseira, Crete*, 1910, Pl. V and pp. 32–4) the fragments were restored as belonging to a single figure. The revised restoration of the fresco by M. Gilliéron, fils, in the Museum at Candia, shows two seated figures. The fragments had fallen from an upper floor (*op. cit.*, p. 15).

[2] Seager, *op. cit.*, p. 10. He also extends the process of rebuilding into L. M. I.

[3] As restored by M. Gilliéron, fils.

Pairs of flutes.

Flutes in sacrificial scene on H. Triada sarcophagus.

to the flounces of one or more of such seated figures. The narrow almost imperceptibly undulating band, Fig. 23, exhibits on its blue ground a row of three pairs of flutes attached to one another by some kind of strings. What seem to be parts of a bone flute were found at Mycenae,[1] but the best evidence of its Minoan use is supplied by the Hagia Triada sarcophagus. A youthful ministrant with long locks is there seen blowing double pipes of more elongated form above a sacrificed bull, laid on a table with his limbs closely bound together in the Egyptian manner, while his life-blood pours into a vessel placed below,[2] Fig. 24. The sacrifice in this case would have had to do with funereal rites: on the other hand in the *Iliad* we find αὐλοί played, together with lyres, at

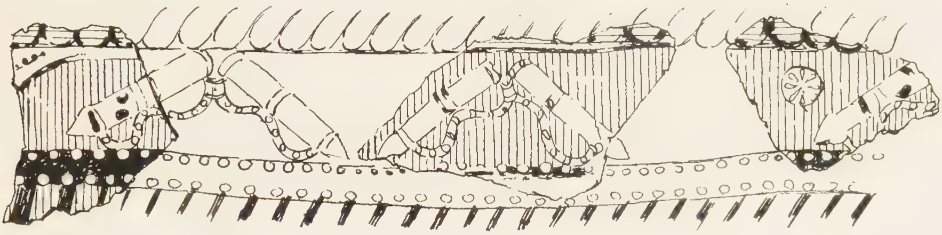

Fig. 23. Embroidered Band with Flutes.

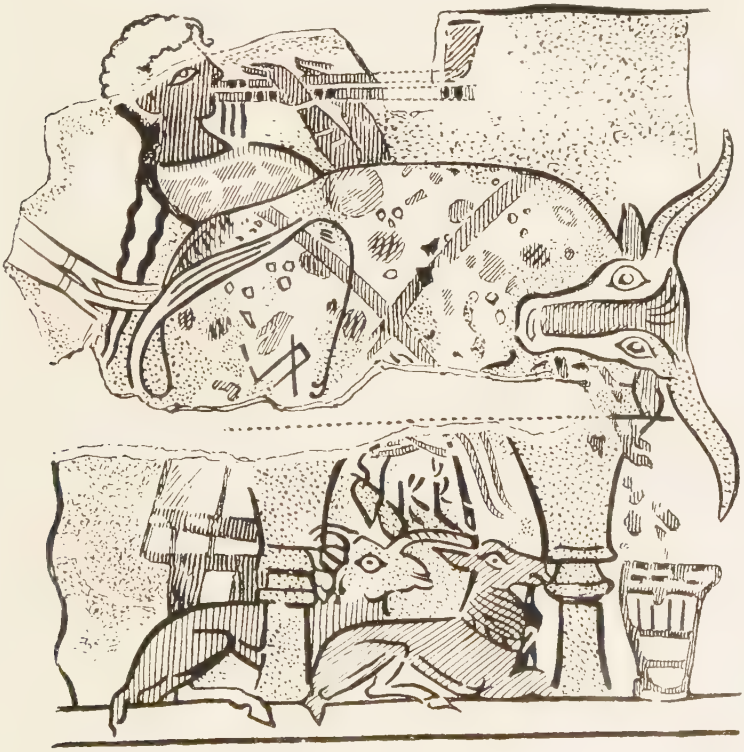

Fig. 24. Sacrificial Ministrant playing Flute: H. Triada Sarcophagus.

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[1] Schliemann, *Mycenae*, pp. 78, 79, and Figs. 128, 129, 130 *a*.

[2] R. Paribeni, *Il Sarcofago dipinto di Haghia Triada* (*Mon. Ant.*, xix, 1908), Pl. II, and

marriage dances.[1] How early the use of the double-pipes was known in the Aegean World may be seen from the marble image of a flute-player found in a grave of the Island of Keros[2] and going back to an epoch corresponding with the last Early Minoan Period.

Bull's head trophy between pair of sphinxes.

Another inset, in a slightly arched space of the larger pattern, consists of a kind of bull's head trophy apparently between a pair of sphinxes (of which only one is preserved), antithetically arranged. The bull's or ox's head figure is completed by another somewhat larger example (Fig. 25, *a*) already illustrated as supporting elephants' tusks.[3] A figure of a seated griffin (Fig. 25, *e*) may have formed part of a similar opposed pair on the same zone. Fig. 25, *f*, shows part of one or other of these sacral monsters with its front facing and expanded wings. There are other enigmatic fragments.

As to the meaning here of the curvilinear arrangement of the larger part of the decorative framework in which these miniature insets are included there can, as already said, be little question. The whole forms part of the front of the robe of a female personage. That the curving bands are in fact quite appropriate in this connexion may be seen, for instance, from the remains of figures belonging to the 'Procession Fresco' at Knossos, and those of Thebes and elsewhere. What is singular in the present case is the introduction of these miniature designs, which have nothing to do with textile art and must certainly be regarded as elaborate pieces of embroidery.

Embroidered swallows on Melian fresco.

A close parallel to this, however, is supplied by the front of the skirt of a female figure, part of which is preserved on some painted stucco fragments found at Phylakopi in Melos (Fig. 26) in the same room that contained the 'Flying Fish' fresco,[4] and, like it, a work of the Knossian School going back to the earlier phase of M. M. III.[5]

A richly dressed lady seated on a rock is here seen engaged in fishing with a net of a kind still used in those waters, and the beautifully outlined arms of a companion, who bends forward,[6] may be thought to be pulling one up.

Here, on the part of the robe corresponding with the lap of the first lady, is an embroidered design of two conventionally rendered swallows set

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pp. 51–4, where the subject is fully discussed. Cf. Mosso, *Escursioni nel Mediterraneo e gli Scavi di Creta*, pp. 260, 261, and Fig. 146.

[1] *Il.* xviii. 491 seqq.

[2] U. Koehler, *Ath. Mitth.*, ix (1884), Pl. VI, and pp. 156–8. Cf. Perrot et Chipiez, *Hist. de l'Art*, vi (*Grèce primitive*), p. 760, Fig. 357.

[3] Cf. *P. of M.*, ii, Pt. II, p. 742, Fig. 475.

[4] See R. C. Bosanquet, *Phylakopi*, pp. 73–5 and Fig. 61 (wrongly described as a man).

[5] See *P. of M.*, i, p. 544.

[6] *Phylakopi*, p. 74, Fig. 62, and cf. *P. of M.*, i, p. 544, Fig. 396.

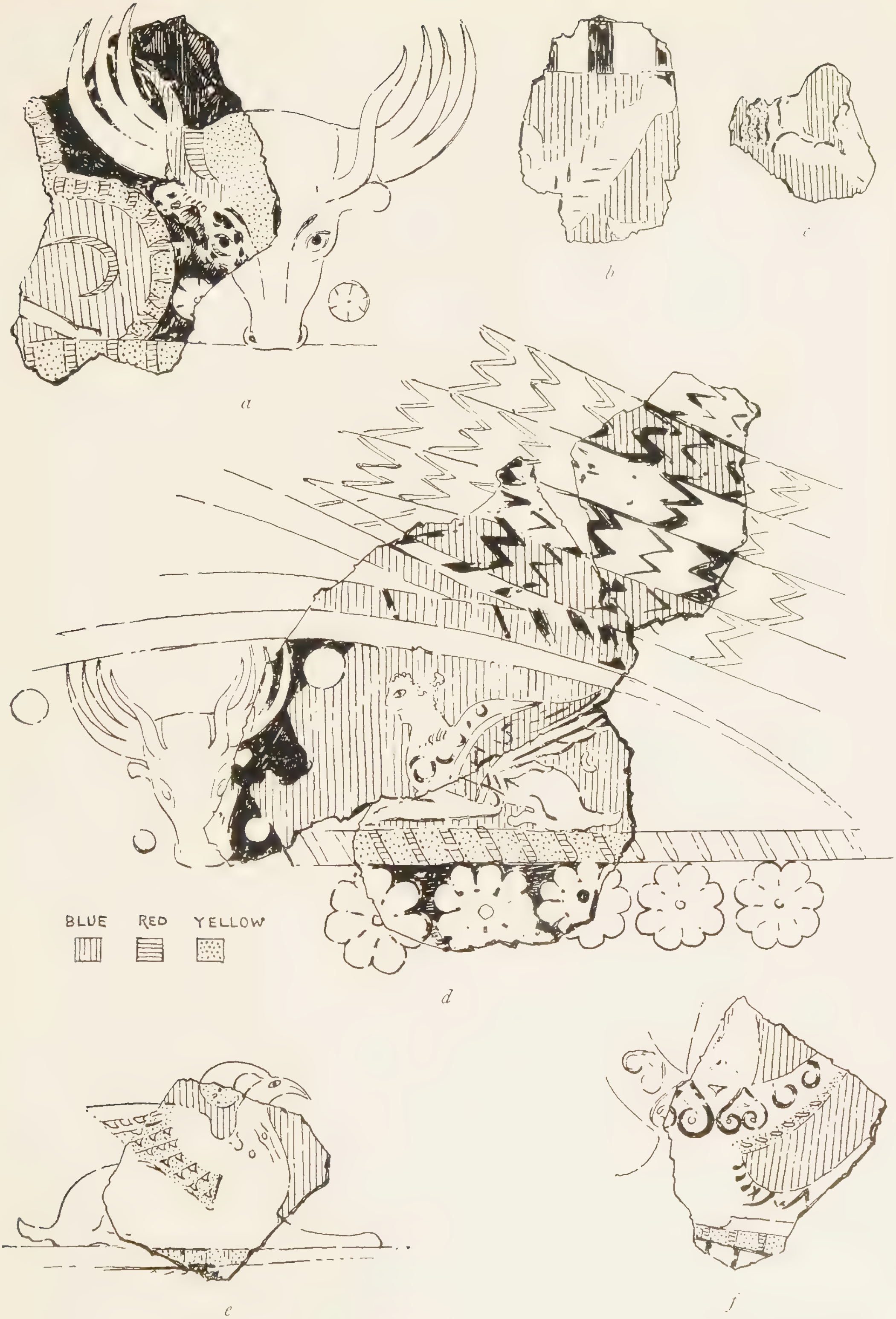
a
b
c
d
BLUE
RED
YELLOW
e
f

Fig. 25. Miniature Subjects from Fresco representing Embroidery on Robes ($\frac{1}{1}$).

back to back. A restored drawing of the whole design is given in Fig. 26.[1] Though the birds—which are of miniature scale—are on a somewhat larger scale, it will be seen that their symmetrical, antithetic position answers to that assigned to the sphinxes and griffins on the present fragments. It will be observed, moreover, that they show the 'notched plume' ornament on their wings under its earlier, well-formed aspect.[2] This feature—seen on the bone arrow-plumes from the Temple Repositories at Knossos, as already noted—has specially religious associations, and not only appears on the wings of the sacred monsters, but forms a recognized ornament on the skirts of the Minoan Goddess and her votaries.[3]

Miniature decoration perhaps from robe of Goddess.

On the whole it does not seem unreasonable to suppose that the robe to which the present group of painted stucco fragments belonged, with its richly embroidered bands, on which the miniature sphinxes and griffins repeat themselves in confronted groups, actually belongs to a figure of the Goddess herself, perhaps in company, as she often appears, with a companion or double. This finds an analogy with the lower borders of the skirt of the facing figure recognized as that of the Goddess in the Procession Fresco, where, though in that case the designs are simply decorative, they are exceptionally rich in ornament. It may be fittingly described as a 'holy robe'.

The style of this large-scale work, the details of which link it on to the miniatures, fully corroborates the conclusions as to their relatively early date. Close comparisons have been established above between it and the group of paintings executed by a Minoan artist at the command of some Melian Prince to adorn the walls of the pillar sanctuary of his residence. But these Phylakopi frescoes in some respects present the finest characteristics of the earlier phase of M. M. III and it is impossible to bring down the date of this Knossian work later than at most the concluding phase of that Period.

The Small Sanctuary Structure containing the 'Miniature' Frescoes.

Commanding corner position of shrine.

Apart from what seems to have been a little nook at its Northern end, the small Sanctuary Chamber, to which the 'Spiral Ceiling' and the purely 'Miniature' frescoes belonged, occupied one of the most important vantage points in the whole building. Its smaller, Southern wall faced the Central Court while that on its Eastern side looked down on the upper section of the Northern Entrance Passage and thus on to the paved ramp that gave the most public access to the interior of the Palace.

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[1] Executed for me by Monsieur E. Gilliéron, fils, who first recognized this feature.

[2] See on this *P. of M.*, i, p. 547 seqq. and Figs. 399, 400, 401. On the griffin of the axe-blade of King Aahmes (1587–1562 B.C.) this Minoan feature already appears in a secondary shape (*ibid.*, p. 551, Fig. 402).

[3] *Ibid.*, pp. 549, 550.

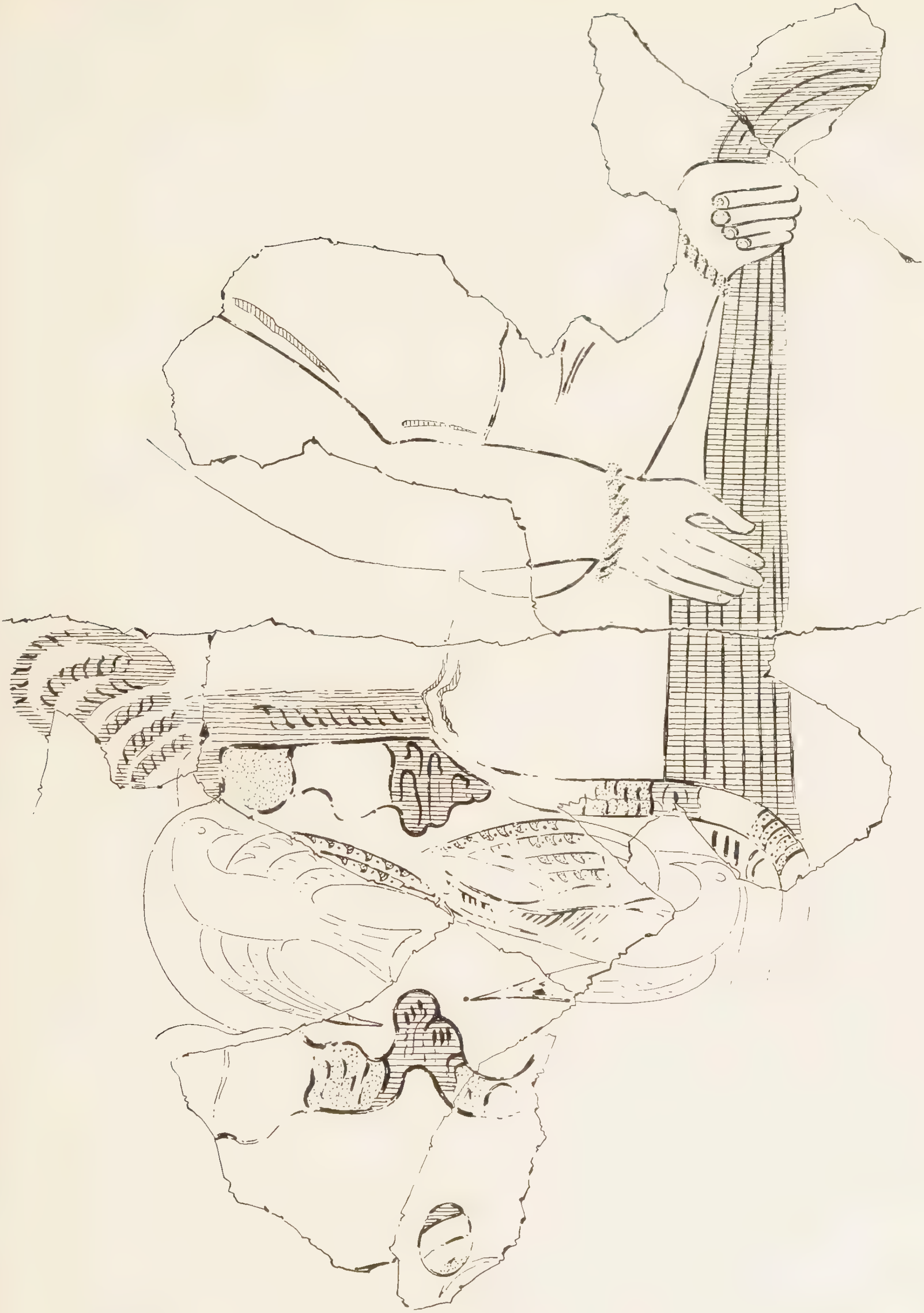

Fig. 26. Figure of a Lady drawing up Net showing Embroidered Swallows on Skirt. (From Phylakopi: partly restored.)

Though small dimensions.

The structure itself was, as already remarked, of quite narrow dimensions, about 4·70 metres (*c.* 15½ feet) from N. to S. and 2·70 m. from E. to W. These general proportions correspond very well with those of the little Shrine that forms the centre of one of the Miniature scenes themselves, or of the analogous structure that occupied a central position on the West façade of the Court, which was about 5 metres (16½ feet) in breadth. In this case the façade would have been on the East side, but the interior arrangement must have been different if we are to interpret the nook at the North end as a *cella*.

The Miniature Frescoes themselves were specially adapted for a little sanctuary chamber of this kind. Some small but very beautiful fragments of such, moreover, found in association with the 'Ivory Deposit' of the Domestic Quarter on the East, were probably derived from an exiguous shrine of the same kind.[1] Such frescoes, owing to the minutiae of their designs, were obviously intended to be placed close to the eye, and it is therefore difficult to suppose that they had been set above the upper borders of the high gypsum dado slabs such as were usual in the Third Middle Minoan Period, and the earlier phase at least of L. M. I.

Frescoes set over gypsum dadoes on line of vision.

The upper part of these slabs, according to the regular arrangement—so well illustrated in the 'Domestic Quarter'—corresponded with the lower line of horizontal beams forming a continuation of the lintel of the doorways. Like the doorways, the gypsum dado slabs were almost exactly two metres in height, and fresco bands, as was shown for instance by fragments found in position in the Bath Room by the 'Queen's Megaron', covered the wooden band, and themselves rested on the upper borders of the dado slabs. In the 'Caravanserai' the 'Partridge Frieze' had been set above this lintel line,[2] and in this case, though the subject was of the natural size, it has the appearance of being somewhat 'skied'. On the other hand, in the 'House of the Frescoes'[3] the friezes of painted plaster with their rich details show traces of a horizontal beam immediately *above* them, and they were probably set below the lintel line, starting therefore, if we allow for a mean height of about 70 or 80 cm.,[4] from a line a metre above the floor level.[5]

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[1] See below pp. 208, 209, Figs. 142, 143.

[2] *P. of M.*, ii, Pt. I, p. 109 seqq., and see p. 108, Fig. 49. The lintel line in this case ran 1·80 metres above the floor.

[3] *Ibid.*, Pt. II, p. 431 seqq.

[4] The preserved height or vertical width of the fresco representing the Sacred Grove and Dance is 49 cm.: if we add to this some additional width for the lower part of the scene, as well as the lower border, the original width would probably have been about 70 cm. The maximum height of the 'Temple Fresco' as preserved was only 42 cm., but the whole of the front scene with the performance is wanting.

[5] *Ibid.*, p. 460. In the basement room of

In a small structure, such as is here presupposed, it is better to take the suggestion supplied by this private house rather than the analogies of palatial corridors and halls, and we may well conclude that Miniature fresco bands, which were probably of about the same width as the panels of the 'House of the Frescoes', started from the same height of 70 or 80 cm., and would in that case have been admirably set on the line of vision.

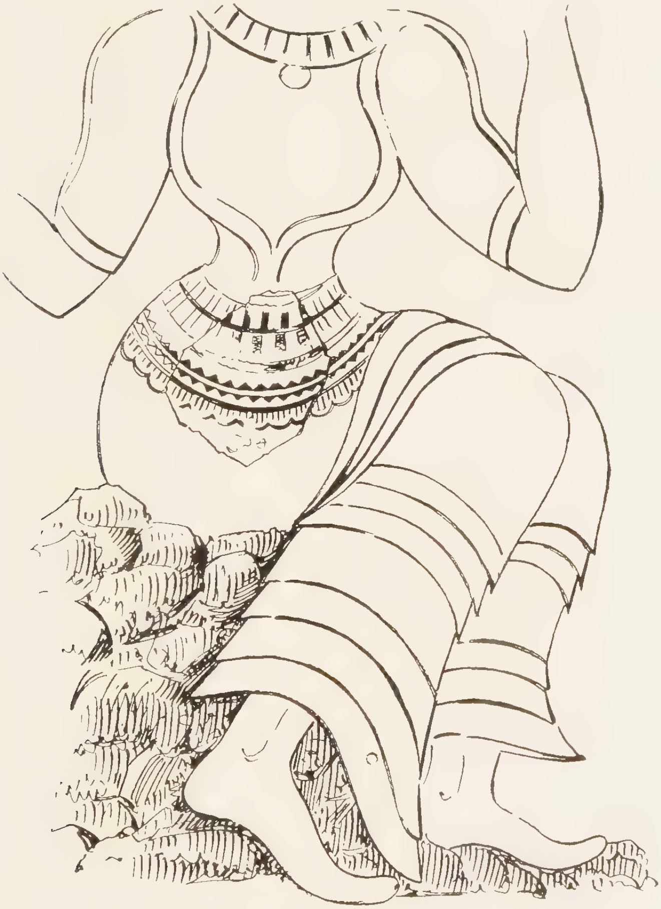

Fig. 27. Restoration of Painted Relief from Fresco Heap of N. Threshing-Floor Area, Knossos (*c.* ¼).

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this house with the double-axe vases (*ibid.*, p. 435 seqq.) a decorative band (superposed on a painted imitation of a narrow horizontal beam) was set only 61 cm. above the pavement.

§ 70. The Miniature Frescoes. 1, The Temple and Grand Stands.

The 'Temple Fresco': its technique; The 'Grand Stand' and Spectators; Artistic shorthand in delineation of figures; Great numbers; The men; The women, more carefully represented—'Court Ladies; Freedom in Art, without decadence; Relation of figures to earlier 'Ladies in Blue'—close dependence; The Seated Ladies—Groups A–E; Groups compared with those of the rococo *Age, as depicted in the boxes of theatres, &c.; Separate groups of women in front seats mark of Matriarchal stage of Society; Dramatic action; Prominence of gesture language—that of Naples compared; Gestures in scenes on signet-rings—primitive elements; Women segregated in front seats but mixing freely with men below; Isolated fragments with parallel groups; Window scenes—Cypriote, Assyrian, and Biblical parallels; Contrast between Knossian Ladies and Oriental 'Hierodules'; Presumption that scenes of the Bull-Ring were depicted in lower part of panel; The Central Columnar Shrine; 'Superposed Pillars' of Grand Stand—parallel examples; Upward tapering posts and their analogies; Theatral significance of single pillars in agonistic scenes.*

The 'Temple Fresco'.

Of the two miniature fresco subjects brought to light in the basement area above mentioned, that called from its central feature the 'Temple Fresco' is represented by the greater number of fragments and may have filled more than one panel. Although only a certain proportion of the fragments could be actually united, the main lines of the composition to which they belonged were fairly clear, while architectural symmetry has supplied a further guide. It has, therefore, been possible to propose a general scheme of restoration, admirably worked out for me by Messieurs Gilliéron, father and son, of which the central section is reproduced in the Coloured Plate XVI.[1]

A restored section of the continuation of the scene to the left is shown in Fig. 28. In contradistinction to a corresponding space to the right of Pl. XVI, if rightly placed the female figures, thirteen in number, are here seen in a standing position. They seem, too, to be placed on a wall-top rather than a plinth.[2] It is noteworthy that there were no figures in the 'pit' below this wing. Was it possibly the side of an enclosure?

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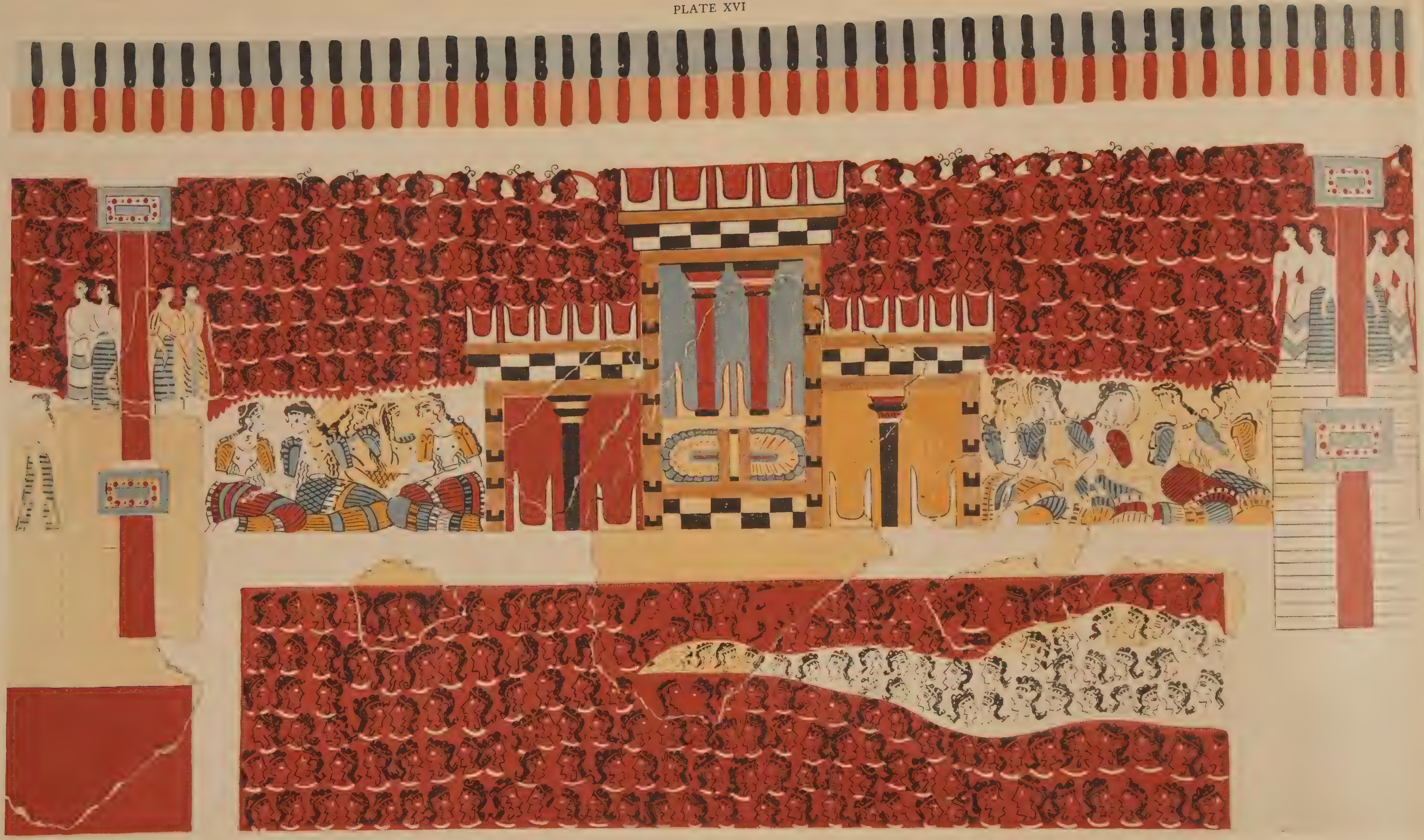
[1] The shrine itself has been also reproduced above in Vol. ii, Pt. II, p. 594 seqq. and Fig. 371.

[2] The horizontal lines on this are not to be interpreted as steps, but rather, as in the case of the adjoining piers, as courses of masonry. See on this, p. 63, note 1.



PANEL OF 'MINIATURE FRESCO' RESTORED, SHOWING CENTRAL PILLAR SHRINE WITH GRAND STANDS ON EITHER SIDE AND CROWDS LOOKING ON AT SPORTS

The artist, or rather artists, who painted the original panels were themselves guided in their general arrangement by incised lines set out in the plaster. A remarkable feature of these lines is that they were produced by means of fine strings or twisted threads strung in parallel lines, the twisted texture of which is clearly impressed on the plaster surface. The border, the outlines of the shrine, and the divisions of the theatre are clearly marked in this way. The broad colouring of the shrine, with its alternating areas of red, black, blue, and yellow, was then rapidly filled in, and also the broad washes of red background to indicate the crowds of men. The details were finally added, evidently with a fine brush.[1]

Its technique.

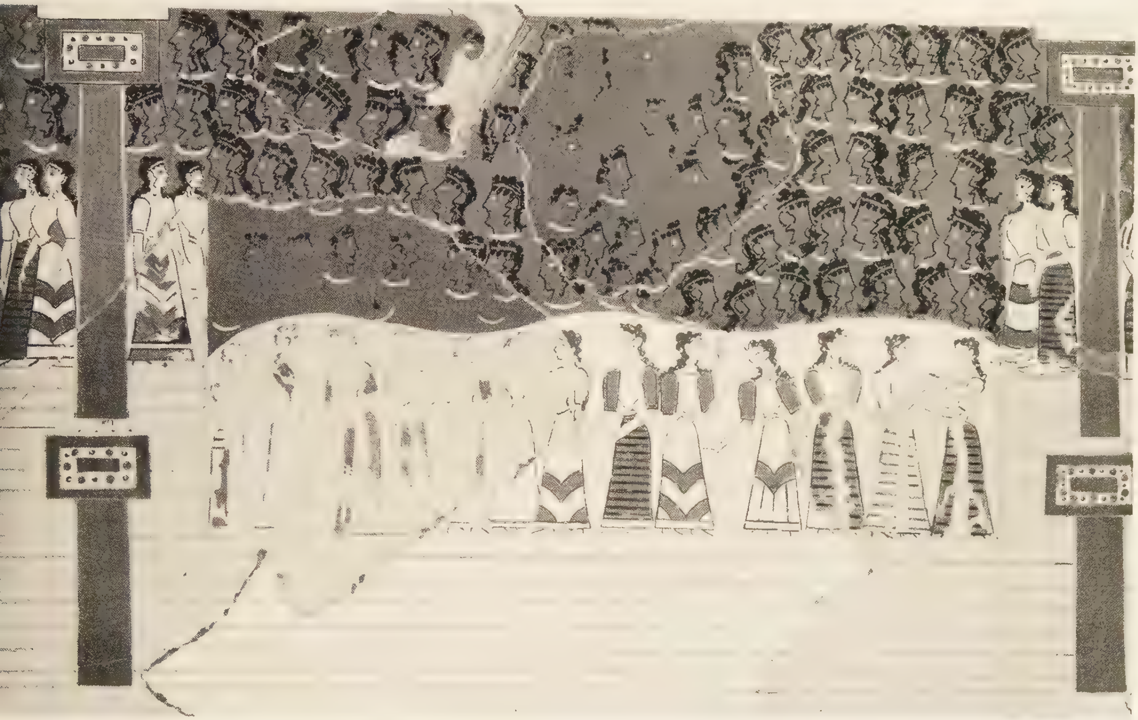


FIG. 28. RESTORED VIEW OF GRAND STAND AND SPECTATORS TO LEFT OF SHRINE.

The whole composition clearly centres round the little Temple, which, though here seen in fuller detail, belongs to the typical Minoan and Mycenaean class. On either side are the terraces and tiers with curiously constructed supporting pillars of a kind of Grand Stand or Theatre, crowded with spectators of both sexes.

The 'Grand Stand' and Spectators.

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[1] These technical details are from a note kindly supplied by Mr. Noel Heaton.

In front again of the central shrine and adjoining wings of the Grand Stand is a rectangular Court enclosed by low walls that divide it from similar enclosures on either side. These spaces, like the tiers behind, are entirely filled with a dense crowd of men and women. Very remarkable is the artistic shorthand here brought into play for the rapid delineation of these multitudinous figures. The original ivory-white background and the broad zones of Venetian red washed on it supplied the conventional colour for the two sexes, alternating in groups; the individual details being then summarily sketched in. It has already been computed that, in the parts of the frieze that it has been possible to restore above and in front of the central shrine and in the first section only of the stands on either side, the number of persons amounted to about six hundred. But parts evidently belong to further panels, perhaps centring round other architectural features, and we can have the actual evidence of only a fraction of the concourse of people gathered from all parts of 'broad Knossos' to look on at the great religious spectacles. In the 'Dance' fresco, when complete, there would have been some 1,400 figures.

Artistic shorthand in delineation of figures.

What an earnest this of the Homeric tradition of the great 'City'![1] What a still living witness to the 'countless' population of Minoan Crete, here chiefly concentrated!

Great numbers.

From the fact that the proportions of these vary in the groups in different parts of the scenes and contain variations in style, we may even infer that, owing to the rapid execution necessary in the fresco process and the complexity of detail, more than one artist had collaborated on a single panel.

The men.

The men, of whom only the busts are shown with white collars round their necks, have curly hair, the locks of which fall down from their temples in front of the ears—like those of the women, and at times, like the latter, they wear a kind of band or diadem.[2] The male heads of the upper row, however—as is shown by the regularly smaller scale on which they are drawn—are probably, like the smaller figures on the companion fresco, intended to represent those of young boys, and these display the peculiar feature of top-knots with a curl in both directions. They are pointing excitedly at some performance which is evidently being enacted in the arena below.

What was the character of the spectacle that thus thrilled the lookers-on? Unfortunately the whole of the lower field of the design on which this was certainly set forth, like the ritual dance on the companion fresco, is in

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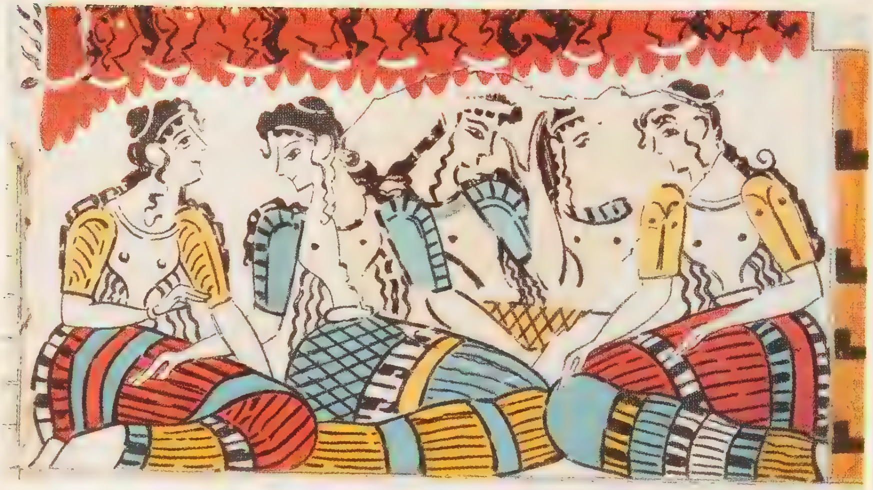
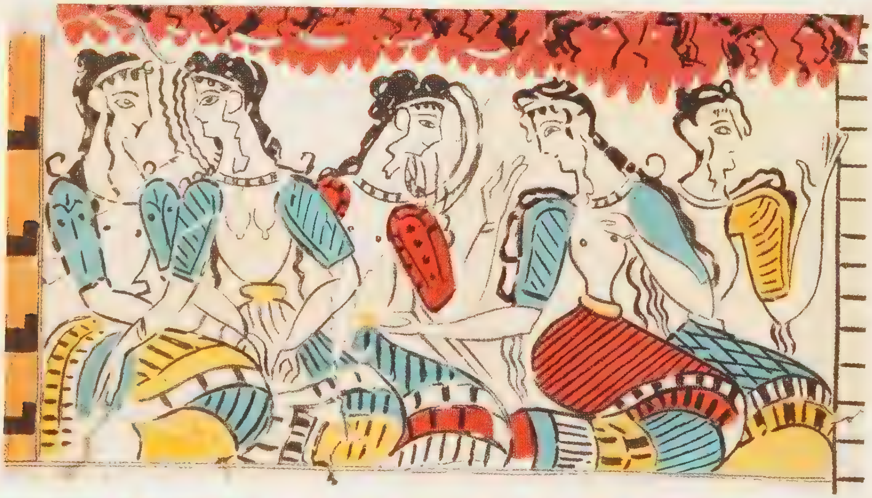
[1] *Od.* xix. 173–4, 178. Cf. *P. of M.*, ii, Pt. II, pp. 564, 566.

[2] It would appear, however, that in the rapid execution of this work the artist or artists have at times inserted the outlines of female heads and coiffure on the red patches.



A



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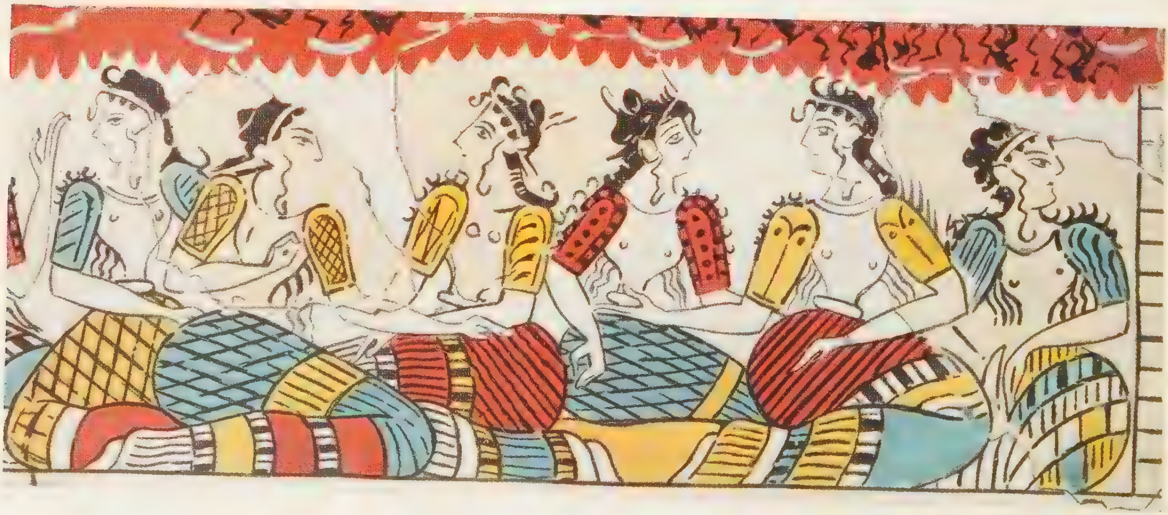

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MINIATURE FRESCOES OF SEATED LADIES ON GRAND STAND

(*Restored Drawing by E. Gilliéron, fils*)

this case entirely to seek. But a welcome parallel from Mycenae and a portion of a fresco in the same Miniature style found in the Domestic Quarter of the Palace itself supply, as will be seen, a probable clue.

The women, more carefully represented.

It is clear that, though the male spectators were the most numerous, the artist's attention was really concentrated on the female figures. The men are treated in the most summary way, only the head and neck with the surrounding collar being rendered, while their eyes are indicated by mere white dots. In the case of the women, on the other hand, their complete figures are reproduced, whether seated or standing, their eyes moreover are duly outlined, and full details are given of their brightly coloured robes.

The Court ladies.

The fine drawing of some of these ladies on a white ground inevitably recalls the white Athenian *lekythoi*[1] executed some eleven centuries later. But what a contrast here in style, in movement, in the character of the figures! We are very far away from the restrained pose of Classical Greece. At a glance we recognize Court ladies in elaborate toilet. They are fresh from the coiffeur's hand with hair *frisé* and curled about the head and shoulders; it is confined by a band over the forehead and falls down the back in long separate tresses, twisted round with strings of beads and jewels.[2] In some cases the locks above the forehead curve down in a curious way above the shoulder.[3] The sleeves are puffed, and the constricted girdles and flounced skirts equally recall quite modern fashions. A narrow band appears across the chest, which suggests a diaphanous chemise, but the nipples of the breasts indicated beneath these—in one case the pendent breasts themselves—give a *décolleté* effect. The dresses are gaily coloured with bands of blue, red, and yellow, showing white stripes and at times black striations indicative of reticulated and scaled designs like those of the Processional Fresco. (See Coloured Plate XVII.)

Freedom in art without decadence.

A curiously artificial atmosphere of social life pervades these highly polite groups of Court ladies with their puffed sleeves, their wasp waists, and elaborate hairdressing. This impression, which smacks rather of Versailles than Florence, made it natural, when they were first discovered, to bring down these productions to the latest phase of the Knossian Palace art, and to an epoch on the brink of decadence. But conclusive evidence, to which attention has been already drawn, is now at hand to demonstrate that the Miniature style in wall-painting was itself fully evolved well before the close of the Third Middle Minoan Period. At most it can be said that the 'Temple Fresco' before us marks the beginning of the New Era.

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[1] See my original appreciation of these figures, *Knossos, Report*, 1900, p. 47 (*B. S. A.*, vi). By a fitting chance one of the first to see them at the time of the excavation was Dr. Wilhelm Klein who had done so much to illustrate the white-figured Athenian *lekythoi*. His surprise at such a revelation of pre-Hellenic art would have rewarded the Minoan artist.

[2] The meaning of the white bands crossing the large tresses of hair is supplied by the 'Ladies in Blue' fresco, of somewhat earlier date, executed on a larger scale (see *P. of M.*, i, p. 545, Fig. 397).

[3] E. g. in Group B, 3, Fig. 30.

Relation of figures to earlier 'Ladies in Blue'.

These frescoes do indeed belong to a stage already removed from that represented by the class of wall-painting that characterizes the earlier M. M. III phase and of which the 'Ladies in Blue' are the best record.[1]

Still, in certain respects, this earlier group, though very different in scale, supplies a real anticipation of that before us. The figures in the former case are of life size, but yet in certain features of hair-dressing and costume present distinct resemblances to the smaller series, and they are also arranged in groups with their skirted legs drawn in sideways, like so many of the miniatures. They show, however, a more stable pose and their outlines are purer and drawn with greater artistic care. Their measured movements contrast with the vivacious gestures of those beside the little Temple. One of the seated figures is seen fingering a necklace, a sign that their conversation—as is said to be commonly the case with harem ladies at the present day—may, even under the freer conditions of Minoan women's life, have largely concerned itself with jewellery and fashions. The subject of a closely related and contemporary painted relief is a man's hand attaching a gold necklace to a lady's neck.[2]

Close dependence.

We must admit, in any case, the close dependence of the Miniature groups before us on these larger works of the immediately preceding epoch, the chief theme of which seems to have been toilet scenes and intimate conversation on subjects of female interest. This dependence, indeed, may help to explain the extreme detachment that these ladies, who occupy the front seats of the Grand Stand, show from the performances of which they were clearly supposed to be spectators. Those posted above on the piers of the Grand Stand and others who appear in a standing position have, indeed, the air of looking on. But the seated figures seem to be only concerned with themselves and their own coterie, the subjects of conversation at times provoking dramatic personal emotions.

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[1] *P. of M.*, i, p. 544 seqq. and Figs. 397, 398. Unfortunately the very imperfect remains of this group have further suffered from the damage done to the Candia Museum in 1926. Amongst other features, the most beautiful detail, the hand fingering the necklace (*ibid.*, p. 546, Fig. 398), has been destroyed. For analogous fragments of figures of the same style found in the Earlier Corridor from the West Porch see Vol. ii, Pt. II, pp. 680–2 and Figs. 430, 431.

[2] *Ibid.*, i, p. 526, Fig. 383. Except for two finger-tips this painted relief was entirely pulverized by the Earthquake. These debris have been reset by Monsieur E. Gilliéron, fils, in a coloured cast already made by him at my request. It does not seem necessary to believe, as suggested by me, *loc. cit.*, that the robing scene had to do with any special sacral function.

The seated ladies: Group A.

Of the two groups, A and B, shown beside the little Temple and between it and the first pier on either side (see Coloured Plate XVII) that to the left (A) can be recovered in its main composition from the remains of the upper part of four figures, all on one piece. The first of these (No. 2) entails the original existence of another on the left, which, according to the space at our disposal, would have completed the group.

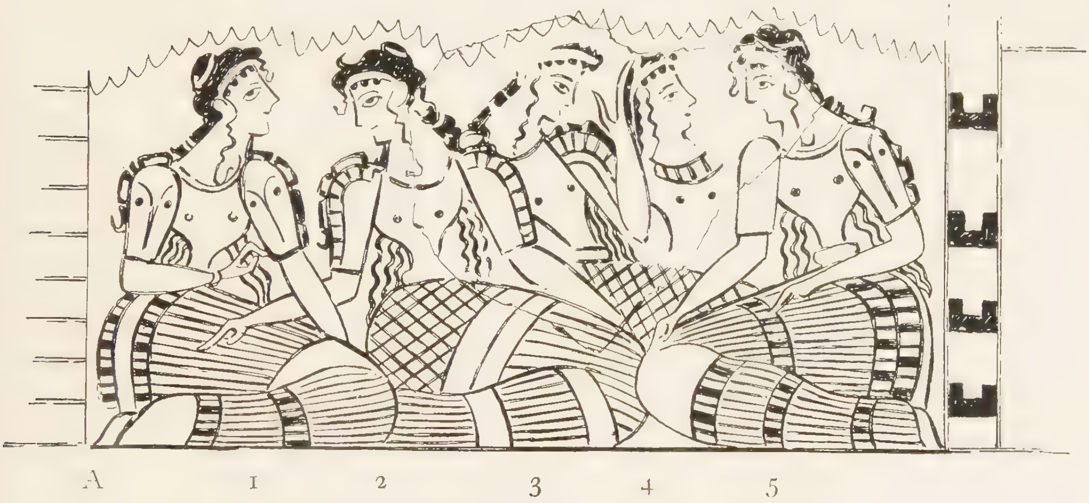

FIG. 29. THE SEATED LADIES: GROUP A. (SEE COLOURED PLATE XVII.)

The reconstitution of the first figure is here based on the corresponding pair of Group B (Fig. 30, 1, 2). It suggests the intimate converse of two confidantes. Nos. 3 and 5 to the right of this show a certain conformity with 3 and 4 of Group B, the raised hand of the first lady being seemingly indicative of surprise at what she is hearing.

Group B.

Group B may be practically regarded as complete except as regards the heads of Nos. 2 and 3. Here the first pair are engaged in a very close *tête-à-tête* talk, the right arm of the second lady being laid on the other's side as if to arrest her attention. A special feature, moreover, in the case of the second figure may have a definite intention. On the other female figures or fragments of such in this series, the bosoms regularly show two mere dots, indicating the nipples. In contrast to this, pendent breasts are here clearly outlined—a matronly touch.

May we venture to suppose that we have here a mother giving social advice to a debutante daughter?

A unique feature of B 3 is the termination below of two long fore-locks in a piece of netting. A veil in such a position seems inexplicable.

The lively nature of the conversation between No. 3—the lady to whose coiffure this net belongs—and her neighbour on the right at once strikes the eye. The latter points her statement by thrusting forward her right arm so as almost to lay her palm on the other's lap, while her confidante raises hers in amazement. 'You don't say so!'—the sense of the words can be supplied, though we may never decipher the language.

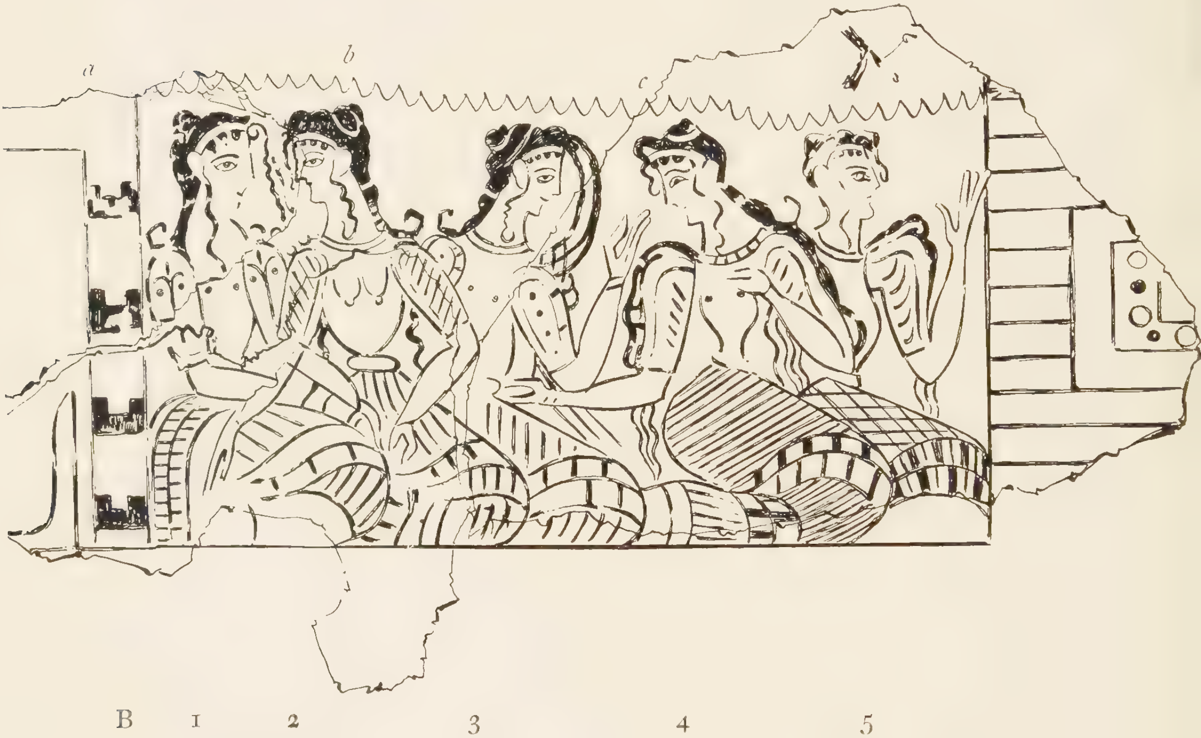

Fig. 30. The Seated Ladies: Group B. (See Coloured Plate XVII.)

Meanwhile, the young woman on the extreme right of the group profits by the engrossment of her companions in their own affairs to beckon to some friend beyond.

A larger number of these ladies occupied the wider space between the pier of the Grand Stand, that rises to the right of the little Temple, and similar piers beyond. This space was of about twice the width of the interval between the first piers and the borders of the Shrine, and accommodated therefore about twice the number of persons. On the basis of the

Group C.

fragments *a–d*, Monsieur Gilliéron has completed Group C of nine persons on the front border of a space of this width—(22 centimetres)—which fills the broad interval to the right of the first pier on that side in the restored fresco.[1] It is reproduced in two slightly overlapping sections in Fig. 31.

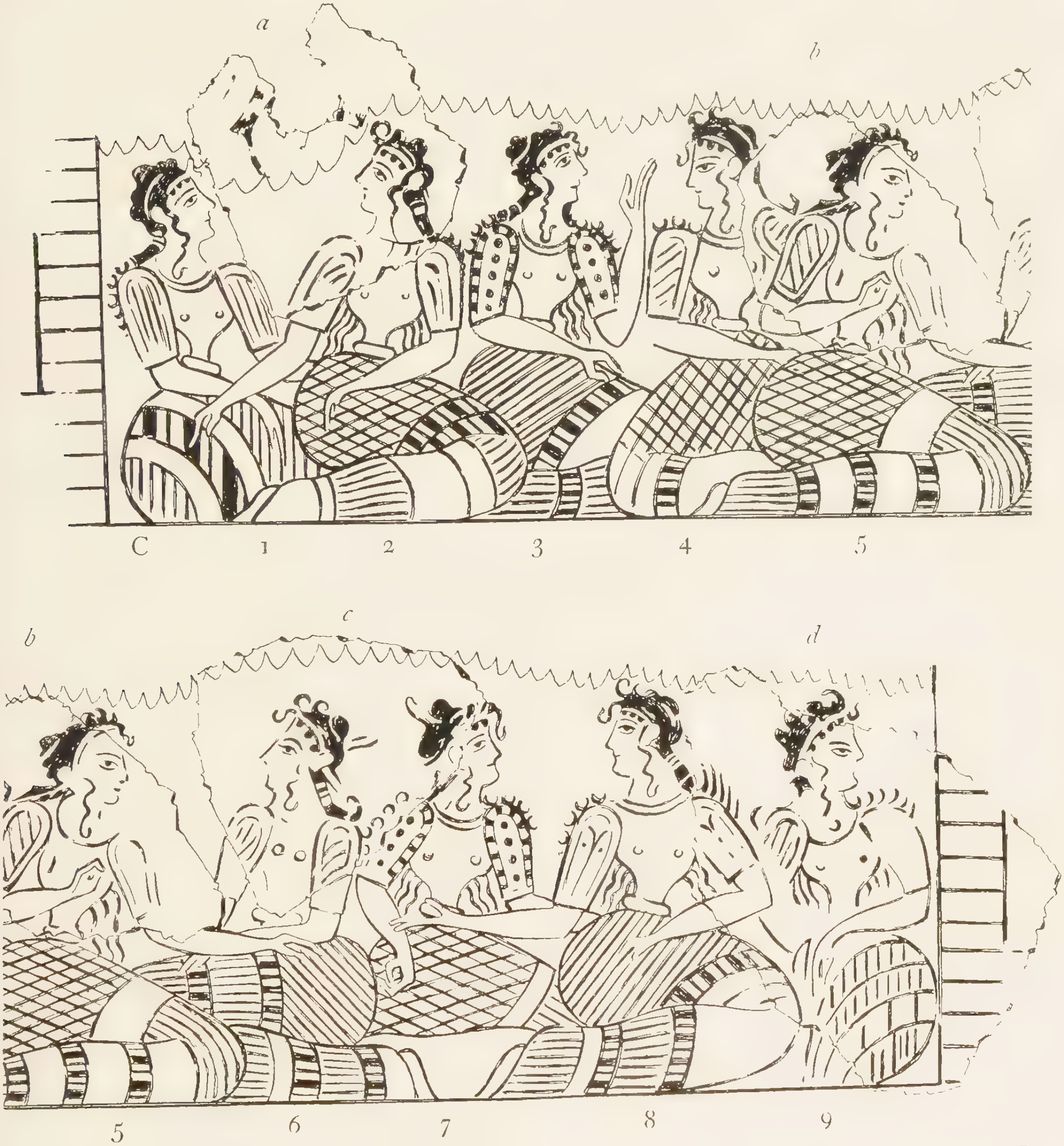

FIG. 31. SEATED LADIES: GROUP C (NINE FIGURES). FOR 4–9, SEE COLOURED PLATE XVII.

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[1] As seen in the Museum at Candia.

Here again the subjects fall into pairs. Of No. 1 there is only a suggestion—the attitude being modelled on Group B, 1 and 2—while merely the head and shoulders exist of No. 2. Of the second group there is only a small part of No. 4. In this case, too, the last figure on the right turns away from the preceding and looks out beyond the pier. The profile rendering of the face in all cases makes it possible, however, that she is intended to be looking straight out at the sacred sports beyond.

The composition itself, as will be seen, is very simple in all cases. The groups are largely discontinuous, the conversation being broken up into pairs, very much as an English dinner party. There, too, when the numbers are uneven the odd one is often left in the lurch.

Group D.

In Group A, indeed, in Nos. 3–5 we have clear evidence of a conversation in which three partake, the middle figure rather as a more or less detached listener. In another shape, in which two are actively concerned with the statements of a third party, this triple arrangement seems to have been twice repeated on the interesting but unplaced fragment, Fig. 32 (Group D).

The upper part of this piece of fresco has been a good deal effaced, but essential traces of three heads, a raised arm, and shoulders can be made out, sufficient to supply the key to a well-founded restoration. At my request Monsieur E. Gilliéron, fils,[1] has made, in Fig. 32, D, *a*, a careful tracing of the design as it exists in its present state and added the completions, as indicated, in Fig. 32, D, *b*.

Dramatic action.

It looks as if what we see in this case is a section of one of the wider groups consisting of about nine persons. Nos. 1 and 2 may thus be regarded as completing another trio. The first of two listeners bends forward with her right forearm half raised, as if intent on what she hears. The body of the second is thrown slightly back with her hand raised in front of her face—she is quite shocked at the scandalous tale! The second trio suggests an even more personal and dramatic interpretation. The first lady, with an emphatic down-thrust of her visible hand on the side of her thigh, bends forward so that her nose almost touches that of the second figure, who seems to raise her right forearm as if in deprecation. But the forward pose of this apparently sharp-tongued neighbour may best be taken to show that

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[1] The late Monsieur E. Gilliéron, père, had executed similar copies for me some years back, but a minute study of the fragment has since elicited some further details including the evidence of the raised hand of No. 2. Apart from these, the new restoration of Monsieur E. Gilliéron, fils, made independently for me, corresponds almost exactly with the earlier drawing, a proof of its essential accuracy.

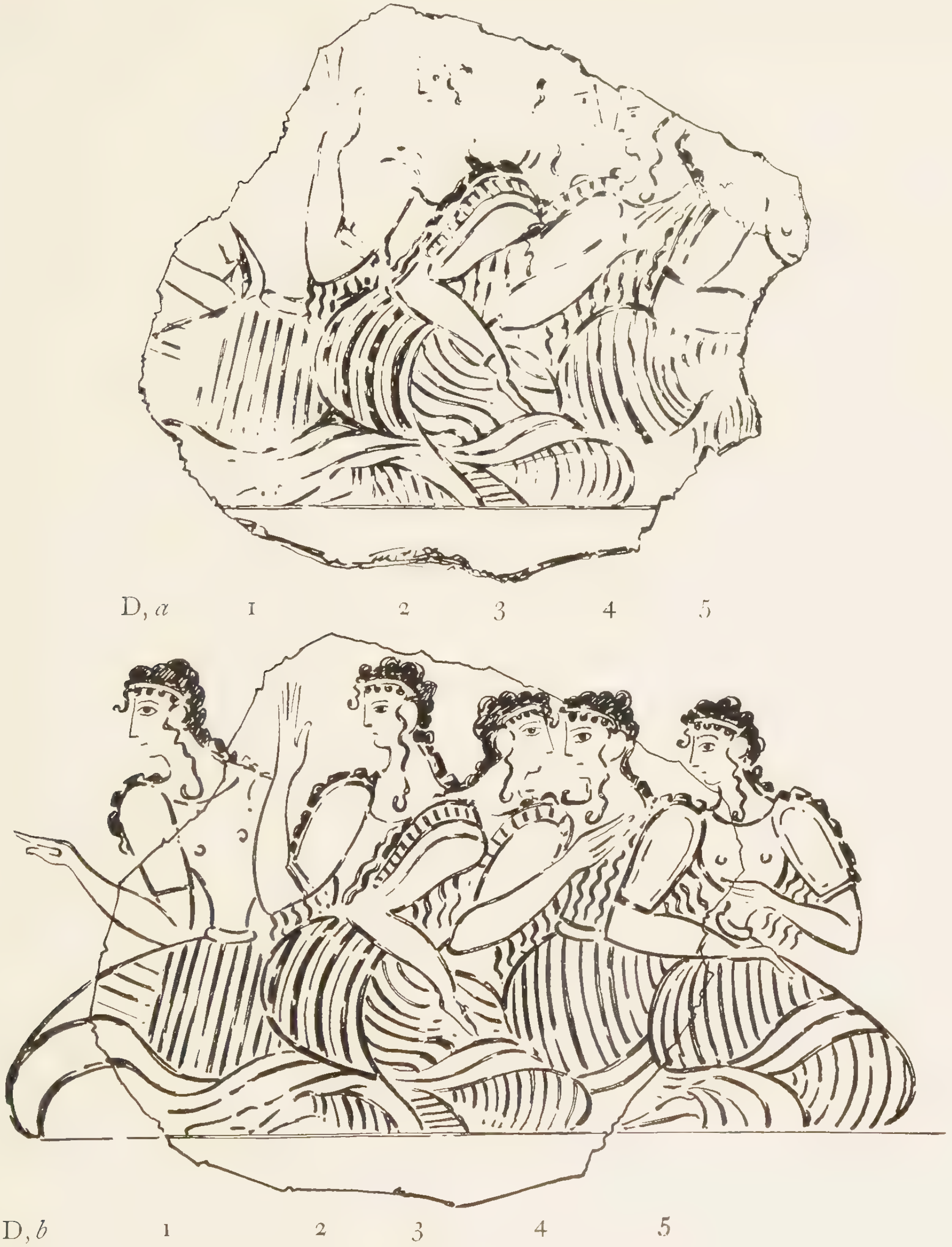

FIG. 32. SEATED LADIES: GROUP D.

her winged words are aimed, across the second of the group, at the young woman on the extreme right.[1]

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[1] The greater part of this figure is wanting, but a section of the forefinger of her left hand is preserved by the nipple of her right breast, showing that her missing arm was turned this

Another isolated fragment is inserted here in Fig. 33 as showing exceptionally fine delineation of a female head. Here the scale is somewhat smaller.

Group E.

Group E, which bears the mark of being by another artist, presents somewhat higher figures and may be reasonably supposed to belong to a continuation of similar scenes on a separate panel. If the arm of the lady on the right is stretched down in the manner indicated she must be taken to be the terminal figure of the group hailing some friend in the 'pit' below. Similar detached action on the part of the outermost figure has been already noted in the case of Group B. Were these ladies perhaps pointing or beckoning to favourite champions in the arena beyond? Such gesticulations would have been quite in the spirit of the Spanish *Corrida*.

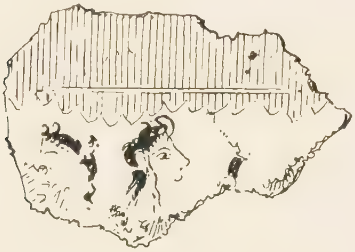

FIG. 33. FEMALE HEADS.

Rococo comparisons.

These scenes of feminine confidences, of tittle-tattle and society scandals, take us far away from the productions of Classical Art in any Age. Such lively *genre* and the *rococo* atmosphere bring us nearer indeed to quite modern times. We recall such groups of fashionable spectators—in these cases embracing both sexes—as that depicted in Tiepolo's Fresco of the reception of Henri III at the Villa Contarini,[1] absorbed in their own social interests, gossiping and flirting under cover of fans, on the balconies above. Analogous groups were executed by Pietro Lunghi in the Palazzo Grassi.[2] So, too, the bevies of gay Minoan ladies seated in animated converse between the piers and pillars of the Grand Stand seem to reincarnate themselves in Guardi's modish figures, with high perukes—feathered, bejewelled, smirking, and ogling their beaux, equally bewigged and powdered—who fill the *palchi* of the Teatro San Benedetto,[3] little concerned with the ball below. Similar scenes in the *loges* of the Théâtre Français are depicted in a print of Moreau le Jeune,[4] where the company has the air of general detachment from the crowning of the bust of Voltaire on the stage before them, which they had ostensibly come to celebrate.

These Minoan ladies, indeed, seated in the interspaces of the Grand

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way and pointing in the direction of No. 3. This may be taken to show that her head was turned in the same direction.

[1] Molmenti, *Tiepolo* (1911): Plates 196, 197. For the selection of these and other later comparisons I am much indebted to Mr. C. F. Bell, Keeper of the Fine Art Department in the Ashmolean Museum.

[2] Aldo Rava, *P. Longhi*, Plates 88, 89.

[3] G. Fiocco, *F. Guardi*, Plate LXII.

[4] '*Couronnement du buste de Voltaire*' (see *Gazette des Beaux Arts*, 1903, p. 387).

But seated ladies belong to period of naturalism in Art.

Stand present a marked contrast to the others from the fact that, so far as these posts of honour are concerned, there is no admixture of the other sex. The phenomenon itself points to very different social conditions from those, like the above, taken from the spectacles of the *rococo* Age. It seems natural to connect it with a matriarchal stage of society, such as otherwise is marked by the dominance of the female divinity. Neither, it may be added, is there anything *barocco* in the artistic environment of the Knossian groups themselves. They belong on the contrary to a period of great naturalism in Art.

Prominence of gesture language.

That the effect of such pictures of artificial Society life should be here brought out successfully by craftsmen working in only two dimensions is itself a remarkable performance. Such a result, indeed, could not have been attained had not the spoken word of the Minoans been largely supplemented and emphasized by gesture language.

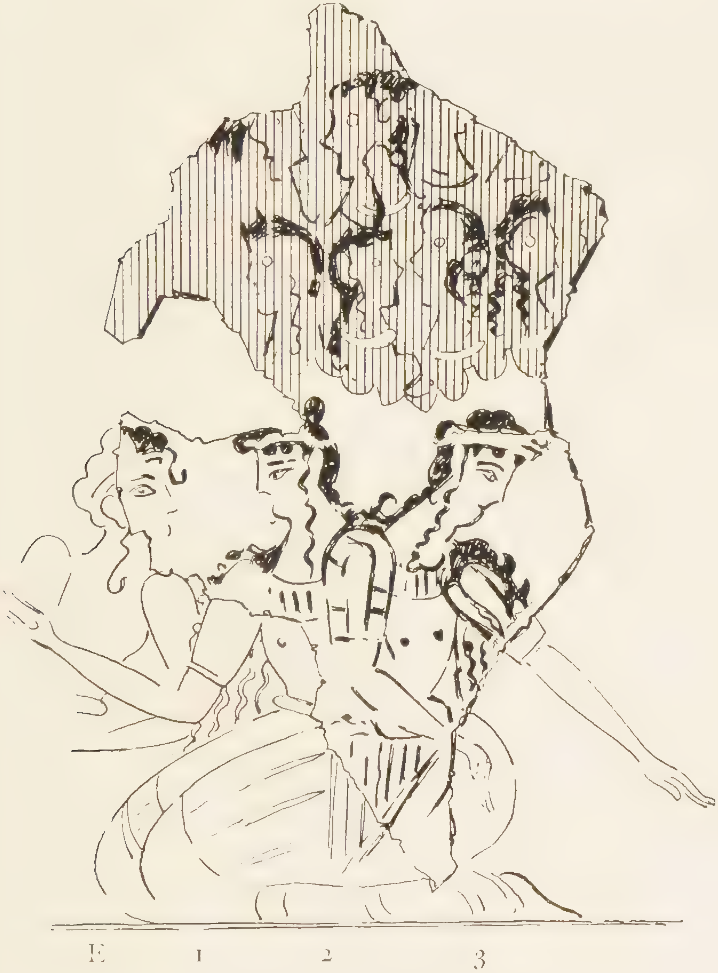

FIG. 34. THE SEATED LADIES: GROUP E.

Even for a Southern people the constant recourse to gesticulation as a substitute or reinforcement of speech that we witness in these Miniature groups must be regarded as exceptional. Naples, perhaps, but certainly not modern Greece, may afford some parallel. The older gesture language of Hellas, such as we see it in many vase-paintings, has hardly received the scientific attention that it deserves, but it certainly played a very secondary

That of Naples compared.

part as compared with what we see here. How far it may have been deliberately kept in the background by the reserved spirit of Greek art it is difficult to say. In any case there is a strong presumption that much of it had been largely taken over from the older civilized element that, even on the Mainland side, can now be shown to have dominated the chief urban centres till at least the thirteenth century before our era,[1] and whose actual tongue, in part of Crete at any rate, survived for another thousand years. It may well be the case that Naples itself—that abundant source for our modern knowledge of the subject [2]—where, with Reggio, the Greek of 'Great Greece' was last spoken on Italian soil, has preserved an uninterrupted South Mediterranean tradition of gesture language, derived on one side at least from a Minoan source.

The gesticulation, however, as seen in these groups of Court ladies, though sometimes pointed, is never violent. It does not over-pass the limits of what is permissible in good society.

Gestures in signet scenes: primitive elements.

Our knowledge of Minoan sign language, as seen on the frescoes, is also supplemented by many of the scenes, at times extremely dramatic, on the engraved signet-rings. We are thus, indeed, led back to a very primitive human stratum, and I have even ventured to compare the attitude of the Goddess, for whom her attendant plucks a fruit from a sacred tree, with a widespread hunger sign and pictograph of the American Indians.[3]

Women in front seats and mixing freely with men.

The women, as we have seen, take the front seats in these shows and the non-admission of male spectators among them may well, as suggested, be a sign of female predominance characteristic of the matriarchal stage. But it was perhaps this very feeling of social superiority that enabled them in the case of the crowd below to mix freely with the other sex. Both are there deliberately grouped together, in a conversational relation. Although, moreover, on the other fragments we see them looking on, as it were, from the boxes of a theatre, there is no sign here of their seclusion in the Oriental, or, one may add, in the South European sense. So far from being veiled their bosoms are at most barely covered by a diaphanous tissue.

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[1] Witness the Theban inscriptions, to which I propose to call attention elsewhere, actually painted on the Kadmeian jars of L. M. III *a* style (XIVth Century B. C.)—after the fall of the Knossian Palace but demonstrating the survival of the script of the Cretan Linear Class B. Similar sign-groups occur, involving identity of language. Some account of these will be given in Vol. IV of this work.

[2] Interesting information regarding the sign language of Naples is collected in the work of the Canonico Andrea de Jorio, *La Mimica degli Antichi, investigata nel gestire Napoletano* (Naples, 1832). The author also attempts a comparison with gestures on Greek vases, that might well be carried farther. Some of the Neapolitan gestures given closely resemble those of the Minoan groups here reproduced. But in the former case there is greater variety in the action of the fingers, and the hand is at times brought up to the face.

[3] *Myc. Tree and Pillar Cult*, p. 79 and Fig. 53 (*J. H. S.*, xxi). See Garrick Mallory, 'Pictographs of the North American Indians', *Fourth Annual Report of Bureau of Ethnology*, (1886), p. 236, and cf. p. 235, Fig. 155.

Free intercourse with men.

Perhaps, however, the most significant feature of the whole composition is the way in which they rub shoulders with the men in the Court below. Their busts are grouped together on the white ground—necessitated in the case of women by the rapid artistic shorthand of this fresco process—which is wedged in patches into the red ground conventionally used for the men. They are clearly meant, however, to be in varied positions—some of them indeed confronting male heads—and they must not therefore be regarded as separate and self-contained elements in the crowd, but rather as units or groups of one or two, mixing freely with the men.

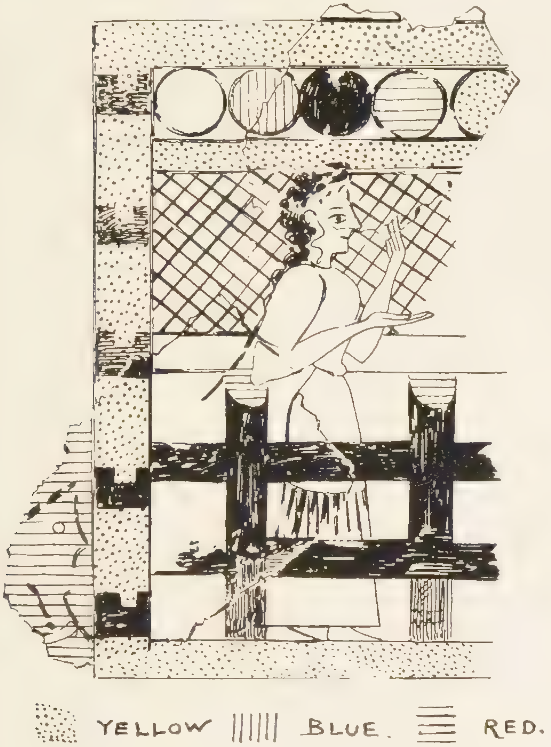

FIG. 35. LADY LOOKING OUT OF BALCONY OR CHAMBER. (THRESHING FLOOR AREA.)

How foreign is such free intermingling to the scene presented by an Eastern bazaar, or to the spectacle that rises to my mind's eye, of the piazza of a little Sicilian town on a festival day—packed with men in their black jackets, without a woman's face or a streak of feminine colour!

Parallel fragments from Threshing Floor Area.

Two isolated pieces of which the restored connexion is reproduced in Fig. 35,[1] were found in the 'Threshing Floor Deposit' on the borders of the same area as the 'Temple Fresco'. These are of the same scale, but must be regarded as belonging to some other parallel design. The subject, indeed, is a good deal on the same lines. It shows a lady—doubtless one of a group—depicted in the same style as those above illustrated, standing behind

Parallel group

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[1] Repeated from *P. of M.*, ii, Pt. II, p. 603, Fig. 376. They were not found in the 'area of the Miniature Frescoes', as there stated, but in the 'threshing floor' area to the North of it.

on isolated fragment.

a kind of paling in front of a balcony or box of some presumably theatral structure, with a netted casement behind her, and looking forth at some spectacle in the foreground. Enough of her bent right arm and of the fingers of her raised left hand is preserved, as, combined with her bent right arm, to suggest a gesture such as clapping the hands.

The supporting post of this structure on the left, clearly intended to represent woodwork, is identical in its details and colouring with the upright pillars of the Central Shrine in the companion piece. This parallel with the 'Temple Fresco' is, moreover, enhanced by the appearance immediately left of this post of a man's face in profile and part of another outlined on a Venetian red ground, and obviously forming part of a closely packed crowd of male spectators like that seen on either side of the little Temple.

Window scenes.

Another fragment found in the fresco heaps to the North-West[1] contains part of a closely related scene showing groups of ladies with highly elaborate coiffure looking out through casement openings formed of cross timbers. This, which is on a slightly larger scale, stands apart, however, from those above described, and belongs to a parallel class illustrated by fragments of scenes found at Mycenae in which ladies are seen looking out of windows. On the frescoes from the Megaron there, presenting the fronts of buildings —which from the non-appearance of sacral horns may be ordinary dwellings of a secular character—single profiles of female busts, disproportionately large in scale, appear at the windows.[2] On the fragment found near the Grave Circle is depicted a broad window opening of the kind frequent in the Domestic Quarter of the Knossian Palace, divided into two by a central post, on either side of which fat women let their arms fall over the embrasure.[3] Here the sacred character of the building itself is shown by the double axes stuck into the window-posts, in the same way as they are inserted in the columns of the sanctuary hall, a section of which appears in the painted stucco fragments found in the Thirteenth Magazine at Knossos. The identity of the structural features exhibited in the case of these fragments which belong to the pre-seismic phase of M. M. III at Knossos, combined with the other resemblances, must incline us to refer the Mycenae fragments approximately to the same Age.

These window scenes, as already shown,[4] find a much later parallel in the bronze stand, from Old Paphos,[1] while the Nimroud panels with a woman's head looking out of a window[2] carry the parallel still farther East. So, too, the Biblical analogies have been already cited, notably that of Jezebel who 'painted her face, and tired her head, and looked out at a window'.[3]

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[1] Cf. *P. of M.*, ii, Pt. II, p. 602, Fig. 375.

[2] *Op. cit.*, p. 601, Fig. 373, *d*. Cf. *B. S. A.*, xxv (1925), p. 247 seqq. and Plates XLII, XLIII.

[3] *P. of M.*, i, p. 444, Fig. 320, and cf. ii, Pt. II, p. 601, Fig. 373, *c*. A coloured reproduction of this was published by Rodenwaldt, *Ath. Mitth.*, xxxvi (1911), Pl. IX, and see p. 222 seqq.

[4] *P. of M.*, ii, Pt. II, pp. 602, 603.

Cypriote, Assyrian, and Biblical parallels.

The latter description certainly recalls some of these highly tired Minoan ladies. The Cypriote, Syrian, and Assyrian parallels have even suggested the question—may we have here to do with temple prostitutes, like those of Byblos or Heliopolis? Had the Cretan Goddess, too, her *kadishtu* and 'hierodules' of the Oriental class within her sanctuaries?

Contrast between Knossian ladies and Oriental 'hierodules'.

The plump dames of the Mycenae fragment and the even ampler proportions of the luxuriously somnolent figures on the well-known ivory mirror handle,[4] from the same site, might at least be taken to illustrate the results of pampered seclusion such as that habitual with the better class women in certain Southern countries. But these ladies of the 'Temple Fresco' and its companion pieces can certainly not be regarded as the products of such a sedentary existence. Still less can they be conceived of as a sacral guild apart, such as those dedicated to the obscenities of the Syrian cult. Their elaborate toilet is sufficiently explained by the festal occasion, and they have obviously taken their seats as much for social intercourse as to see the sports. Mixing with other spectators, slim, lithe, vivacious, many of them were no doubt ready, according to the practice of Minoan girls—seemingly, even in a good position in life—to exchange their gay jackets and flounced skirts for boys' loin-cloths and to step down into the Bull-ring to take their part in the athletic and acrobatic performances.

Presumption that sports of bull-ring were depicted in lower part of panel.

In the case of the 'Temple Fresco' itself no remains have been preserved of the lower part of the panel—or possibly a lower band of fresco—depicting the spectacle that the Grand Stand was designed to overlook. But a variety of converging evidence from parallel sources is at hand to enlighten us.

It has been already shown[5] that among the painted stucco remains from beneath the 'Kasella' floors of the Thirteenth Magazine—so important from their ascertained M. M. III dating—there was found, together with the fronts of columnar halls and sanctuaries, part of a fresco design showing a crowd of men above a wall[1] identical in style, on a slightly larger scale, with the throngs on either side of the Miniature Temple (see above, Fig. 15 B). In the same deposit, though of still larger dimensions, was a design of the head of a charging bull showing beneath the horns the ends of the flying tresses of some acrobatic figure. So, too, a fragment of painted stucco found in the 'Ivory Deposit' described below shows part of a coursing bull, in connexion with a miniature entablature of a shrine marked by the Double-Axe symbols of the Goddess.[2] In other cases, as has been shown, the characteristic pillars that mark the Grand Stands are associated with boxing and wrestling bouts which, like the bull-grappling scenes that they also accompany, must equally be regarded as held under divine patronage.

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[1] *Ibid.*, p. 602, Fig. 374, and cf. A. S. Murray, *B.M. Excavations in Cyprus*, p. 10, Fig. 18.

[2] A. S. Murray, *ibid.*, p. 10, Fig. 17.

[3] 2 Kings ix. 30.

[4] From the Grave Pit discovered by Tsountas in the dromos of the 'Clytemnestra' tomb at Mycenae (Tsountas and Manatt, *Mycenaean Age*, p. 187, Fig. 82). Another in the Athens Museum from the same grave described by Mr. A. J. B. Wace (*B. S. A.*, xxv, pp. 369, 370) shows a similar relief. From the short hair and the equally short skirts Mr. Wace suggests that these and other Mycenaean ivories may have been imported from Cyprus. But short skirts themselves are an M. M. III characteristic.

[5] See *P. of M.*, i, pp. 527, 528.

The central columnar shrine.

The central Shrine or little Temple (Pl. XVI), which on the Miniature Fresco now under discussion marks the presence of the Goddess at the spectacles in her honour, answers in its arrangement to that of the little gold models from Mycenae, consisting as it does of a central *cella* of higher dimensions flanked by two wings. In this case, however, the fluttering doves of the wings—the symbols of divine possession—are replaced by a series of sacral horns, and the central compartment shows two columns, appropriate, it would seem, to a dual cult. The back wall of this central section is of a *kyanos* blue colour, that of the lateral sections Venetian red and ochreous yellow respectively, though whether these colours have a special religious significance, as they might have had in Babylonia, remains uncertain. Of the half-rosette panel below the central opening something has been already said. The woodwork framing with which this was fixed and the posts and beams of the structure are clearly marked by the brown colour.

That this little building consisted of a central cell with two shallow columnar wings may be gathered by the existing traces already described of a similar shrine on the West façade of the Central Court.[3] In the present case, however, we see two columns within the central compartment, while the other structure had only room for one.

The 'Superposed Pillars' of the Grand Stand.

Superposed pillars of Grand Stand.

It remains to call attention to some other remarkable architectural features presented by this fresco panel. On either side of the section, the centre of which is occupied by the little shrine, appears a staging consisting of peculiar columns, the shafts of which, in contrast to the usual Minoan practice, widen towards their base. The upper and more taper end of the lower shafts is socketed into an oblong block enclosing in its blue outer framework a series of red and black disks. Superimposed on this block is a column base from which rises a similar shaft, the taper of which continues that of the shaft below. It may be inferred that this, as shown in the restoration given in the Coloured Plate (opposite page 47), was surmounted by a similar block—in this case a true capital, supporting some kind of entablature. The remaining parts of the column of this form, seen to the left of the central section, are shown in the photographic reproduction, Fig. 36, which also gives a good idea of the incised lines on the surface of the fresco. It will be there seen that the shafts run up the face of what appears to be a projecting pier of masonry.[1] This pier forms a platform

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[1] *Ibid.*, p. 527, Fig. 384.

[2] See below, p. 207 seqq.

[3] See *P. of M.*, ii, Pt. II, p. 804 seqq., and plans and elevation, Figs. 526, 527. Cf. A. E., *R. I. B. A. Journ.*, 1911, p. 294 seqq.

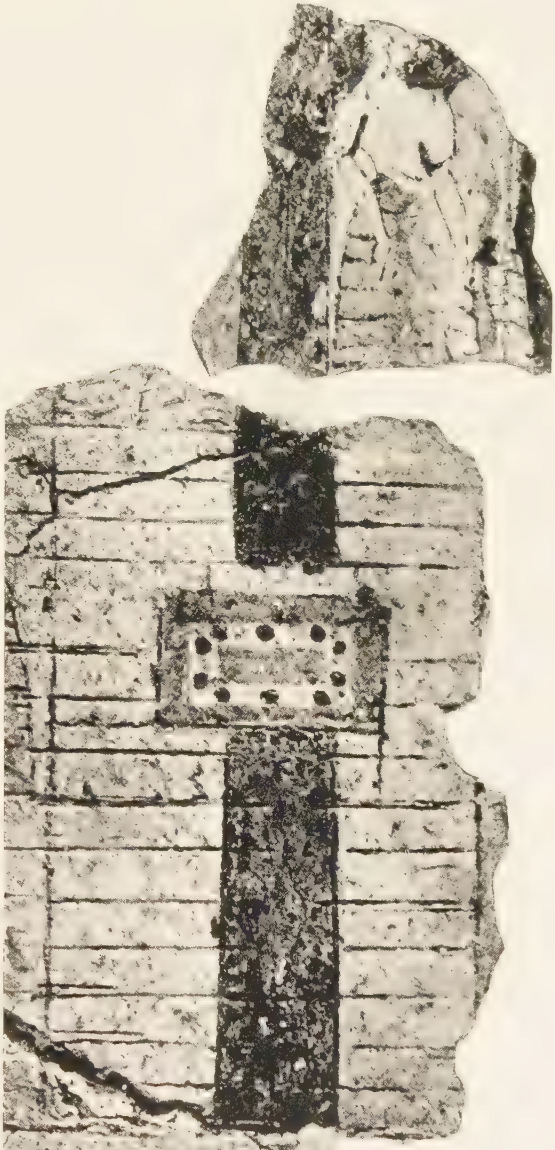

FIG. 36. 'SUPERPOSED PILLARS' OF GRAND STAND.

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[1] It is true that the horizontal lines on the piers show no upright divisions, and might therefore be interpreted as steps. But, if they are steps, balustrades at the sides might have been expected according to Minoan analogy. Their perpendicular borders separate them off from the similar horizontal divisions of the intervals, which otherwise correspond with their eight lowest lines. Considering the summary rendering of many details of this compo-

a little above the oblong block, on which are standing female figures in elegant pose and attire.

The lacunas in our evidence prevent the completion of the structure, but the fresco fragments supply remains for two pairs of such supporting pillars and piers on each side of the central Shrine. Between these in either case are seen lower terraces with female figures, sometimes seated, sometimes standing. It looks, therefore, as if we had to do with the supports of some kind of roof or awning for the Grand Stands of spectators attending the ceremonial show.

Parallel examples.

Since the discovery of the Temple Fresco several illustrations of pillars and imposts of the same character have come to light, all of approximately contemporary date. A small bone model of an oblong capital of this type occurred in a Knossian deposit.[1] Single pillars of the same kind, as has been already shown, divide the boxing or other contests on a series of steatite 'rhytons' and gem impressions found at Knossos, Phaestos, and Hagia Triada.[2] The fullest illustration, however, is supplied by the relief on a fragment, apparently belonging to a 'rhyton', of grey steatite, found in the N.E. area of the Palace site at Knossos and illustrated in Fig. 37. Here we have a processional scene of youths bearing offertory bowls advancing on the level beneath an isodomic structure, parts of three piers of which are seen stepping up. The wooden pillars with their rectangular imposts are placed at the intervals between the piers, to the framework of which they therefore actually belong.

Upward tapering posts and their analogies.

It is impossible in the present state of our knowledge to explain the precise constructive value of this system of pillars and imposts. The position between stepped piers as seen on the 'rhyton' fragment in itself recalls the gaps once filled with massive upright beams between the bastions of the North Entrance passage. The distinctive feature of the superposed pillars is the fact that, unlike the typical Minoan columns—as seen, for instance, in the little 'Temple'—the circumference of which gradually grows greater as it ascends, the shafts in this case become smaller as they mount upwards. Structural analogies for this system can, however, be found at Knossos itself. As we see by the example of the roof of the Pillar Room in the

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sition it seems on the whole safest to suppose that the lines represent courses of masonry, or possibly sun-burnt brick construction, faced with stucco imitative of stone-work. It is awkward for a pillar to have stood immediately at the foot of a flight of steps. If it is courses of masonry in the one case it is hardly steps in the other.

[1] With the incised bone inlay of *vesica piscis* form in the ventilating shaft South of the Domestic Quarter.

[2] See *P. of M.*, i, p. 688 seqq.

Royal Villa[1] a split tree-trunk could be made use of, retaining to a great extent its taper form. The Corridor again that runs beneath the East wall of the great Palace Hall adjoining the 'Domestic Quarter' shows the same system carried out in the case of upright timbering. Here, as will be seen from Suppl. Pl. XXXV, *a*, showing a section of M. M. III *a* walling superposed on a massive M. M. II course, the taper form of the trunk is clearly preserved in the lower section.[2]

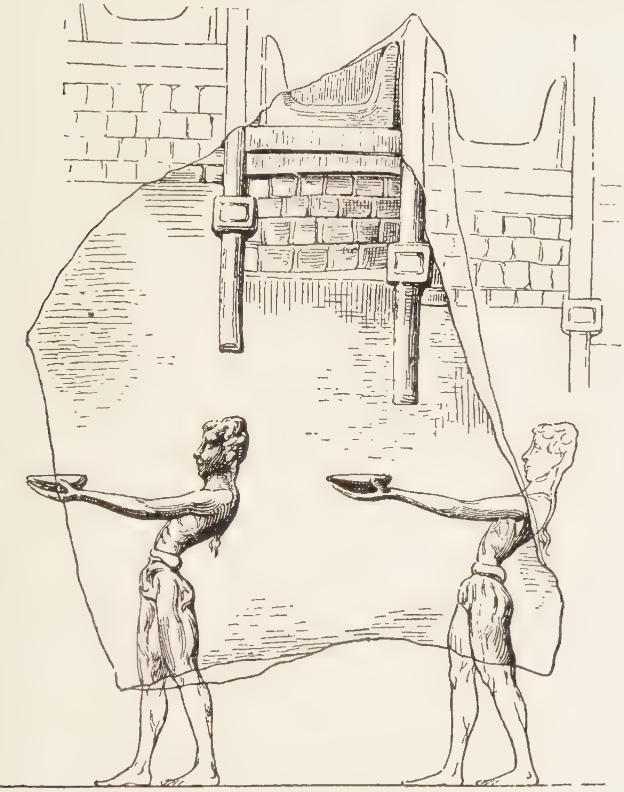

Fig. 37. Part of Steatite 'Rhyton' with Offertory Scene and Superposed Pillars.

Theatral significance of single pillars in agonistic scenes.

The visible function of these 'superposed pillars' in the case of the Temple Fresco, as part of the Grand Stand, and apparently as supports of some kind of roof or awning above the tiers of spectators at ceremonial sports in honour of the Goddess, explains their introduction beside representations of agonistic episodes on the small reliefs and intaglios. They are there the symbols of the theatre itself and are introduced as indications of the ceremonial and religious character of the sports. They find in fact an exact parallel in the single Doric or Ionic column placed beside the scenes on Greek painted vases—those, too, often of an agonistic nature—and which stand there as abbreviated indications of the Temple or the *Stoa*.

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[1] See Vol. ii, Pt. II, pp. 407, 408 and Fig. 235.

[2] Here, as in other cases, in order to preserve the record of the carbonized timbering, and at the same time to maintain the whole structure, the interval originally occupied by the woodwork has been filled in with ferro-concrete.

§ 71. THE MINIATURE FRESCOES: 2, SACRED GROVE AND DANCE.

The 'Sacred Grove and Dance'—Centre of interest to left; Self-absorption of the female groups; The Dance—separate performers; Ritual Dance on Isopata signet; Ecstatic figures—Sacred Eye in background; Ecstatic possession—Philistine Prince at Dor; 'Saul among the Prophets'; Dancer on Vapheio gem; Fresco of Dancing Lady in 'Queen's Megaron'—mature L. M. I work; Terra-cotta group from Palaikastro—a 'ring dance'; Central object of the 'Grove and Dance' religious; Aphroditê Ariadnê; Theseus and the Delian Crane Dance; Both sexes included in later ritual dance; Traditional Dances of Cretan peasants—the 'Kastrinós', &c.; Secret Dance of the women; Mazy course of Dances; All 'Chain Dances'; 'Leaping Dance' (πηδικτὸς χορός)*—tumbling performance, as Homeric; 'Leaping Dance' of Cretan Apollo Delphinios; 'Siganós' and choral accompaniment—Matinadas; The 'Dancing Ground of Ariadnê' at Knossos; Its probable position and character as illustrated by Fresco; Level site bordered by old olive-trees, beneath E. slope of Palace; The Magic of the Spot.*

'Sacred Grove and Dance': centre of interest to left.

WHILE in the case of the 'Temple Fresco', described in the preceding Section, the central part, including the little shrine itself, was the most fully preserved, the bulk of the fragments of the companion piece, here entitled the 'Sacred Grove and Dance', seem to lie to the right of the point on which the interest is centred. It will be seen that most of the crowds of spectators, at least of the male sex, have their faces turned to the left. The ladies, equally closely packed, whose heads are seen in the field above the trees are nearly all gazing in the same direction. Those seated in the front row, indeed, like the similar groups of the 'Temple Fresco', form an exception to this rule, being entirely engrossed in each other's conversation and quite oblivious of the show itself.

The technique of this fresco and the scale of the figures correspond with the other,[1] and we notice the same shorthand execution—persons of both sexes being sketched respectively on broad backgrounds of their conventional colours—red or white—washed in with a single sweep of the brush.

The restoration was drawn at my suggestion by Monsieur Gilliéron, père, according to a scheme gradually worked out by means of the fragments preserved. It cannot profess to do more than place them in a kind of logical relation to one another, but the general result will hardly be called in question. (See Coloured Plate XVIII.)

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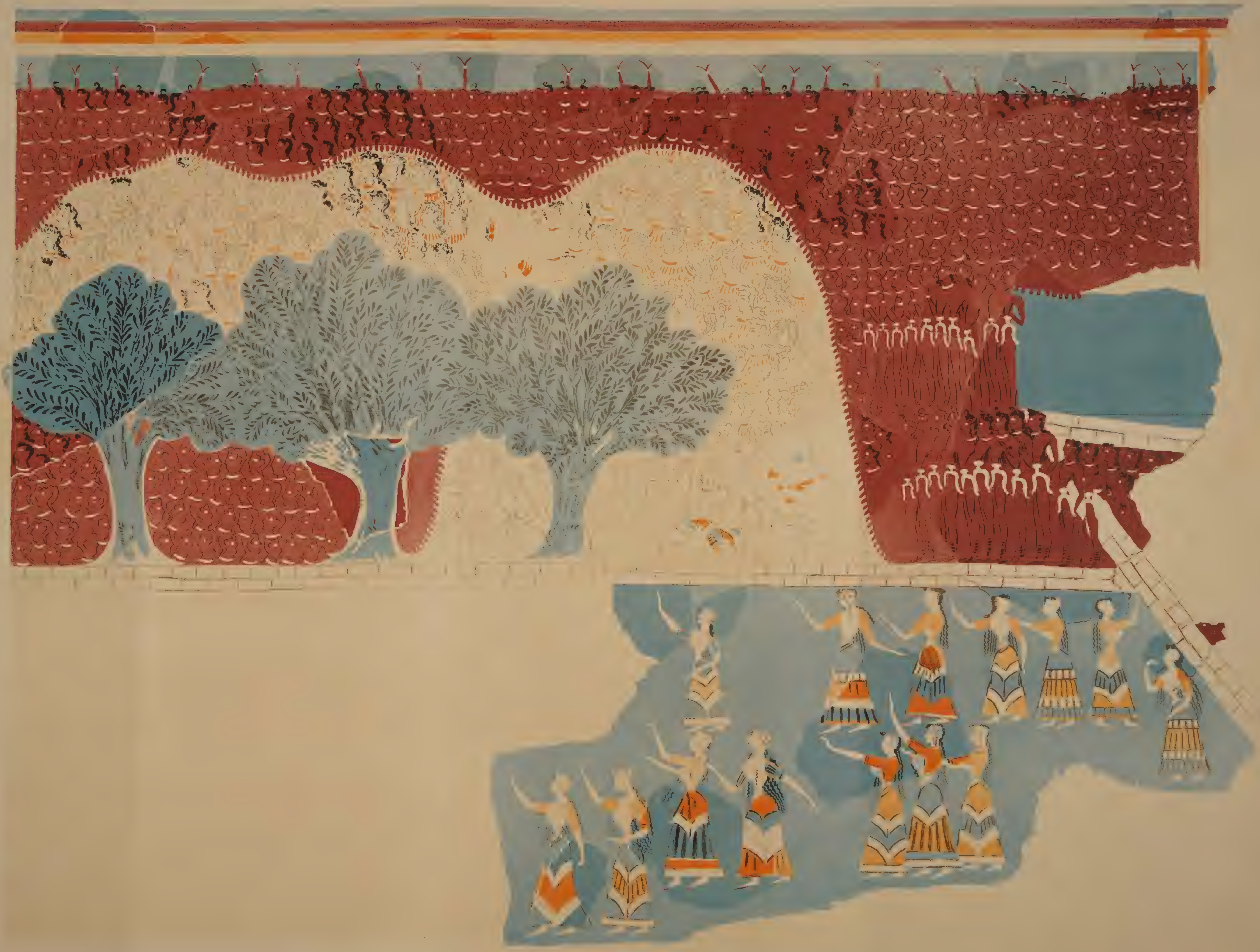
[1] See above, pp. 47, 48.



MINIATURE FRESCO OF THE SACRED GROVE AND DANCE

The spectators.

We see here what seems to be a sacred grove of olive-trees[1] within a walled enclosure containing crowds of spectators of both sexes. The numbers in this section of the fresco—apparently about a third of the whole—may be reckoned as 350 men and 120 women. The men are naked except for their buskined feet, girdles, and loin-cloths. They wear collars round their necks, and long locks of hair stream down under their armpits—while in place of the double crest seen above the heads in the companion piece, they show a single curl above the forehead. In this case, full-length figures of many of the male figures are given, the distinction between men and boys being clearly indicated in the group on the right by their respective statures. They are standing in serried crowds, and—as is also the case in the Temple Fresco—those of the top rank are raising their hands in excited gesticulation and pointing towards some spectacle on the left.

Self absorption of female groups.

On this, as in the companion piece described above, the women occupy the front places, and the same psychological distinction is drawn by the artist between the two sexes. While the men are for the most part entirely absorbed in the performance and their eyes drawn one way, 'these ladies', as already remarked, seem to have been as often as not taken up with their own affairs and to be exchanging confidential remarks with one another.

The dance—separate performers. Ceremonial dance in walled enclosure.

The special feature which distinguishes this representation from that with the Grand Stands is that in this case part at least has been preserved of the performance for which the spectators are gathered. In the open space in front, beyond the isodomic temenos wall and bordered by another diagonal line of similar walling on the right, groups of women on a blue ground are seen performing what seems to be a ceremonial dance. Their hair streams out behind them in separate tresses, in a manner that in some cases is clearly indicative of a quick rhythmic movement, and the attitude and arrangement of the figures as far as it can be reconstructed is certainly suggestive of a sinuous meandering course—such as is associated with the traditional Knossian dance in Ariadné's honour. Their dress reproduces the fashionable cut of the ladies of the Temple scene. They wear short-sleeved jackets open at the bosom, diaphanous chemises, and flounced gowns, the prevailing saffron hue of which had perhaps religious associations.[2] In nearly all cases they have one hand raised or held out before them, as in the act of adoration, towards some sacred personage or object on the left. Unfortunately the central point of interest in this direction to which the spectators turn is wholly lost. Some enlightenment as to its character may, however, be drawn from the subject of a more or less contemporary gold signet-ring found in the smaller built Tomb at Isopata near Knossos (Fig. 38).[1]

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[1] Part of two trees found. A third is added in the scheme of restoration.

[2] See Vol. i, p. 506.

Ritual dance on signet.

This displays a group of four female figures engaged apparently in a ritual dance in a field of lilies. They have long flowing locks and are attired in the same flounced robes and short-sleeved jackets as those of the fresco. Three of them raise their arms as in the attitude of adoration, while the central figure, on a somewhat higher level, holds one arm to her side and lifts the other to the side of her head. In the upper part of the bezel, separated by a broken, wavy line from the two dancers below, is a small female figure, short-flounced—an archaic touch. The wavy lines here are the equivalent of the more elaborate waved borders that in other cases delimit earth and sky, leaving a reserved space for the divinity or the heavenly luminaries. Here we must recognize the Goddess, one arm stretched forward to greet her dancing votaries—the tress of hair that flies behind her head telling of her rapid approach from her celestial realm.

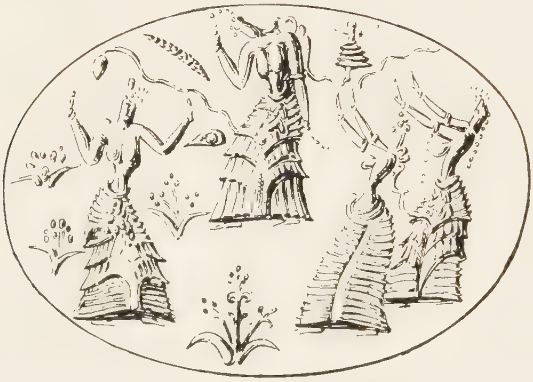

FIG. 38. GOLD SIGNET-RING, FROM THE SMALLER BUILT TOMB, ISOPATA.

In the same way we have seen on another Knossian signet the upward flying locks of an armed male divinity brought down by the incantations of his votary before a sacred obelisk.[2]

Ecstatic figures.

Here, however, it is not a baetylic pillar but the dancing human figures themselves that are the objects of possession, the orgiastic dance, together with the chaunts that accompanied it, being the obvious vehicles of incantation.[3] The religious intention of the whole scene, moreover, is here brought out by a remarkable though not unique feature. In the field behind the dancers appears a human eye, which, like the 'Eye of God' so frequently seen in old biblical illustrations, may be taken to symbolize the all-seeing presence of the divinity.

On a clay seal-impression from the Little Palace[4] we have seen eyes,

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[1] See my *Tomb of the Double Axes and Associated Group* (*Archaeologia*, 1914, p. 10 seqq.).

[2] *P. of M.*, i, p. 160, Fig. 115.

[3] See A. E., *Tomb of the Double Axes, &c.* (*Archaeologia*, 1914, p. 12).

[4] *P. of M.*, i, p. 705, Fig. 529, *d*, and repeated, Vol. ii, Pt. II, p. 789, Fig. 515.

Sacred eye in background.

delineated as here in human shape, on the wings of butterflies—which, indeed, are still regarded by the Cretan peasants to-day as 'little Souls'—and it is an eyed butterfly that hovers over the Elysian blooms on the painted stucco relief of the Priest King. In the upper field of a signet presenting a religious scene, in which the Goddess and the young archer God take part,[1] we find again the eye, coupled with the ear, as a symbol of a Power both all-seeing and all-hearing. The ear symbol seems to recur in front of the dove on the bronze votive tablet from Psychro.[2]

Ritual Dances and Ecstatic Possession.

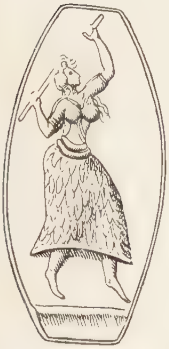

Fig. 39. Ecstatic Dancing Figure on Vapheio Gem ($\frac{2}{1}$).

Ecstatic possession: Philistine prince at Dor.

On a fragment of a black steatite rhyton from the site of Knossos already illustrated,[3] we may recognize the ecstatic possession of a male devotee before the altar of the Goddess—a scene that recalls an episode witnessed by the Egyptian envoy at Philistine Dor, whose Prince, by means of sacrifice, set off his chief page into an ecstatic fit of dancing, in which state he voiced the divine commands.[4]

Saul among the prophets.

We may infer from numerous analogies that the sacrifice here was not without an instrumental accompaniment such as the flute-playing depicted over the slaughtered bull on the Hagia Triada sarcophagus.[5] The ecstatic state produced recalls the biblical account[6] of how Saul became possessed of the 'Spirit of Jahwe' when he joined the processional band of prophets coming down from the 'high place' or sanctuary (*bamah*), preceded by harp, drum, pipe, and lyre, so that he 'prophesied' with the others.

Dancer on Vapheio gem.

In some cases, as on one of the Vapheio gems,[7] we see a single female figure in ecstatic action (Fig. 39). She holds in her right hand what appears to be a flute and raises the other—apparently holding another pipe—above her head. Her hairy skirt might have been made of the skin of a victim, like that—there showing a short tail—of the female votary who on the Hagia Triada sarcophagus is pouring the blood of sacrifice into the vessel set between the baetylic Double Axes.[1] On a gold signet from the same tomb a similar orgiastic figure receives the source of her inspiration in the fruit of a sacred tree through the hands of her minister. The scene and the subject in this case apparently had a funereal association.[2] On the bezel of a gold ring from the Phaestos cemetery another female votary dances before the seated Goddess, who is backed by her baetylic pillar.[3]

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[1] *P. of M.*, ii, pp. 841, 842, Fig. 557.

[2] *P. of M.*, i, p. 632, Fig. 470.

[3] *P. of M.*, ii, Pt. II, p. 614, Fig. 386.

[4] The episode occurs in the account of the Mission of Wen Amon, in the Golenischeff Papyrus. On this individual possession, see *P. of M.*, i, pp. 223, 224, where the settled dove is shown to be the outward sign of the entrance of the divine spirit into the votary.

[5] See above, p. 39, Fig. 24.

[6] Samuel x. 5 seqq. For biblical examples of sacred dances and ecstatic possession see especially W. O. E. Oesterley, D.D., *The Sacred Dance, a Study in Comparative Folklore* (Cambridge, 1923). Dr. Oesterley (*op. cit.*, pp. 108, 109) points out that *hebel*, the word translated 'company' of prophets in the A.V. is primarily a 'rope' or 'string', and implies a procession in single file. He compares (pp. 58, 59) a monument in the palace of Asshurbanipal, where a procession, the foremost in which are dancing, is led by men playing harps. He also instances the Hittites, on the rock relief of Boghazkeui, who are in single file, performing 'a running step dance'.

[7] 'Εφ. 'Αρχ., 1889, Pls. X, XII, pp. 165, 166; Furtwängler, *Antike Gemmen*, ii, 45.

Fresco of dancing lady in 'Queen's Megaron'.

The upper part of a female figure, about half the natural size, in painted stucco found in the 'Queen's Megaron',[4] here shown in the photographic reproduction, Fig. 40, may also be taken to be that of a dancer thus individually inspired with ecstatic motion. She is clad in a jacket of the ordinary type and therefore cannot be regarded as a female taureador, since such wore only the loin-clothing common to the male performers.[5] Her hair, indeed, flies out on each side of the neck, in a very similar manner, but in this case as an indication that she is whirling round in the dance. Her left arm is bent and her right thrown forward in an attitude resembling some of the figures in the 'Sacred Dance' before us. Her jacket, like those of the dancers there, is of saffron colour, here bordered by blue and red, while across her neck appears the upper line of a diaphanous chemise. From the occurrence of the remains of this fresco in a small heap of stucco fragments near one of the dividing pillars of this Hall,[6] it is highly probable that it had filled one of its panels, and in the coloured frontispiece of this Volume it will be seen restored in this position, for which the self-contained nature of the subject made it specially suitable.

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[1] See *P. of M.*, i, p. 438 seqq. and Fig. 317. The male offertory figures wear similar skins.

[2] See my *Myc. Tree and Pillar Cult*, p. 78 seqq. and Fig. 52 (*J.H. S.*, 1901, p. 176 seqq.). The scene on another gold signet from Mycenae (*op. cit.*, p. 79, Fig. 53, and see Fig. 91, below) must be regarded as of a parallel nature. The dancing figure referred to by me, *loc. cit.*, as the Goddess may possibly be regarded as a votary possessed by her divinity.

[3] L. Savignoni, *Scavi e scoperte nella necropoli di Phaestos* (*Mon. Antichi*, xiv, 1904, p. 578, Fig. 51). The intaglio is worn, but the figure to the left seems to me to be that of the Goddess (marked by the pillar behind her) in the usual side-squatting attitude of Minoan women. It is described (*loc. cit.*) as a man in an orgiastic state throwing himself on his knees, and about to embrace the baetylic column. But the figure is clearly female, with even excessive pectoral development.

[4] See below, Coloured Plate XXV, facing p. 370.

[5] See p. 212 seqq., and Fig. 144, and compare *P. of M.*, ii, Pt. I, pp. 34, 35 and Suppl. Pl. XIII.

[6] In the original Report (*Knossos Excavations*, 1902; *B. S. A.*, xi) it was suggested that the fresco had been derived from the North Wall of the Megaron, but its revised location is better and more consonant with the circumstances of its finding. See, on this, pp. 369–71 and Coloured Plate XXV.

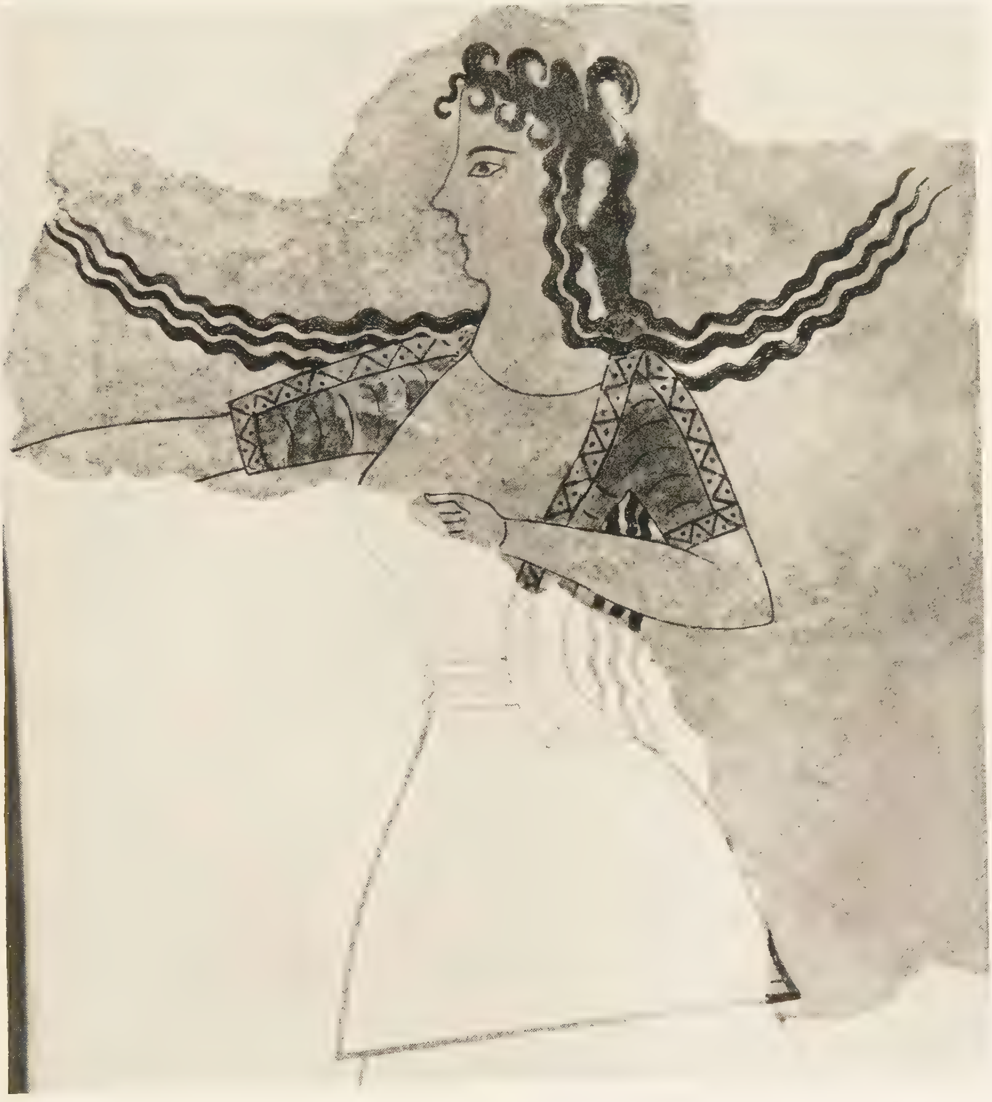

FIG. 40. DANCING FEMALE FIGURE, FROM 'QUEEN'S MEGARON'. (FROM PHOTO. OF ORIGINAL.)

Mature L. M. I work.

There can be little doubt that this fresco belonged to the same epoch of re-decoration in this and the adjoining chambers as the spiral dado of the bath-room and its connected system. It would therefore have been executed about the close of the earlier L. M. I phase and belongs to a date approaching 1500 B.C. It is therefore of decidedly later date than the 'Sacred Grove and Dance'.

In these cases, where the mainspring of the action is the individual possession, we have a class of performance which in its extreme results is still vividly illustrated throughout the East by the dancing dervishes. In one form or another, indeed, the *pas seul* is the prevailing characteristic among oriental dancers of both sexes, even on ordinary festive occasions that have no religious significance. In many such dances that I have witnessed the body is slowly rotated while its more fleshy surfaces are made to quiver like a jelly by intensive muscular action. The power of producing this is possessed in an extraordinary degree by Hungarian gipsies.

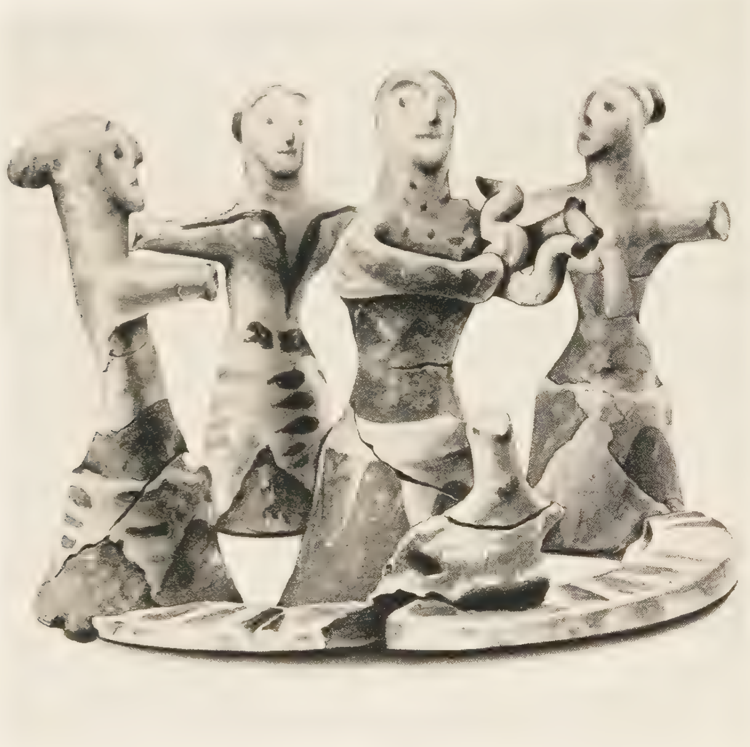

Fig. 41. Terra-cotta Model of Lyre-player, Ring Dance, and Dove: Palaikastro.

Dancing of this individualist kind may, nevertheless, be carried out by a series of performers so as to execute a combined figure, and it is joint action of this kind that we recognize in the scenes depicted on the Miniature Fresco and on the Isopata signet. The dance here in both cases is *ex hypothesi* of a ritual character. One or other of the priestesses may have led the train, but the dancers themselves must be severally regarded as inspired with the divine afflatus.

Chain or ring dances in honour of the Goddess.

That there were also 'chain' or 'ring' dances in honour of the Goddess in which the performers joined hands may be gathered from the remarkable terra-cotta group found at Palaikastro (Fig. 41).[1]

[1] R. M. Dawkins, *Excavations at Palaikastro*, iii (*B. S. A.*, x, p. 217 seqq.). The objects were found in Room 44 of the large Mansion or Palace with vases of L. M. III *a*.

Terra-cotta Model of Ring Dance from Palaikastro.

Terra-cotta group from Palaikastro.

In this composition, which from the associated pottery can be shown to have belonged to the early part of L. M. III, three female votaries are seen with outstretched hands forming part of a circle round a central female figure of the same kind playing a lyre. The figures stood on a flat clay support and faced inwards, looking towards the musician.

May not the lyre-player be the Minoan Goddess herself under the same aspect as Apollo *Kitharoedos* whom, as we have seen, she in some sort actually anticipated in a female shape?[1] It is a noteworthy fact that her sacred dove is set on the stand in front of her, in place of another human figure, to complete the ring.[2]

That the terra-cotta group was intended to represent dancers in a ring and not a chain dance seems to be the more probable conclusion, the gap being left in front to give room for the sacred bird and to open out the view of the lyre-player—here identified with the Lady of the Dove.

The long dress of these figures preserves in a degenerate form traces of the bodice and apron of the earlier Snake-Goddess group, and must be regarded therefore as representing a purely Minoan tradition.

Central Object of Performance on Miniature Fresco Religious: the 'Dancing-place of Ariadnê'.

Central object of 'Miniature' dance religious.

In the case of the miniature wall-painting with which we are here concerned we may conclude that the central object of veneration to which the spectators turn and towards which the dancers are advancing, whether

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'All four figures are covered with a pale powdery slip, and the dress and features rendered in reddish brown paint.' The central figure, owing to the rude execution of the lyre, was there taken for the Snake Goddess. The true character of the object was first recognized by Professor Mosso (*The Palaces of Crete and their Builders*, p. 282 and p. 283, Fig. 136). The lower part of the figures is interesting as showing a transitional form between the 'bell-shaped' skirts of Petsofà and the L. M. III cylindrical type as seen in the 'Shrine of the Double Axes'. A ridge already appears round the upper part of the skirt of the figure to the left (cf. R. M. Dawkins, *B. S. A.*, x, p. 218). In *P. of M.*, ii, Pt. I, p. 342 I expressed the same opinion, as against my original view that the cylinder represented a baetylic column (*B. S. A.*, viii, p. 98). It is nevertheless true that the figures in the fully developed cylindrical type can only be regarded as semi-anthropomorphic, and that we may legitimately recognize the reaction of a columnar form.

[1] *P. of M.*, ii. Pt. II, p. 837. In the case of the Cypriote and Cilician double of the Goddess of Paphos (who is inseparable from the Minoan Dove Goddess), this male consort, Kinyras, is the actual impersonation of the lyre or *kinnor*. It, too, could be regarded as a 'Beth-el', and its notes as those of a divine voice.

[2] Prof. R. M. Dawkins observes (*op. cit.*, p. 219) that 'the place of a fourth votary was filled by the painted bird'.

animate or inanimate, iconic or aniconic, was of a religious nature. The composition cannot indeed be taken apart from its companion piece in which we see the theatral background of a parallel ceremonial show—with the actual shrine, as a visible token of the divine participation, occupying the central position.

We have here in fact a ceremonial dance carried out in honour of the Minoan Goddess—with whom may probably be associated her male satellite—on the borders of her sacred Grove.

Aphroditê Ariadnê.

Theseus and the Delian 'Crane' dance.

When we recall the tradition that Daedalos had constructed a 'dancing-ground' (*χορός*) for Ariadnê at Knossos, this conclusion is the more interesting. The Cretan Goddess, as transported under her Hellenic guise to Cyprus, was herself known as Aphroditê Ariadnê, 'the exceeding holy',[1] the name itself being a Cretan dialectic form. This Minoan Ariadnê was specially connected with Amathus, whither, according to the local legend,[2] Theseus had borne his spouse, and where was not only her Sacred Grove, but, in conformity with the Minoan religious tradition, a Holy Sepulchre. For the ritual dance on the other hand we turn to the Delian story.[3] According to this, Theseus, arriving in Delos after his victory over the Minotaur, commemorated it by instituting the 'Geranos' or 'Crane' dance. He first set up the image of Ariadnê, 'the work of Daedalos',[4] and the Keratôn altar, the horns of which were on the left-hand side, and round this led a *χορός* of the boys and girls that he had rescued from the monster, imitating in its movements and the accompanying strains 'the inward and outward windings of the Labyrinth'.[5] Recently discovered inscriptions have now brought to light the interesting fact that there was a fountain called Minoê in Delos, and that 'Minoid' nymphs were there adored.[6]

Both sexes in later ritual dance.

In one marked feature, indeed, the later tradition diverges from what we are able to learn from existing evidence with regard to Minoan dances. The ring-dance as we see from the Palaikastro terra-cotta was itself already in existence, but in this, as in the more individualist dances such as we see on the signets and on the Miniature Fresco, the dancers are all women. It is clear, however, both from the Homeric account of Hephaestos' design and from the Delian tradition, that both sexes took part in the ceremonial dance performed in honour of Ariadnê. It is thus that they are shown on the celebrated François Vase, the alternating chain of the liberated youths and maidens, preceded by Theseus playing the lyre, who acts as leader of the dance, while Ariadnê stands in front and holds forth a wreath and the clue of the Labyrinth. The intermingling of the two sexes, shoulder to shoulder, in the Court that forms the foreground of the 'Temple Fresco' shows indeed that socially there could have been no objection to such mixed dances, but, as far as can be seen, Minoan religious practice confined the joint performances to women. It is a symptom of a matriarchal stage.

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[1] According to the generally accepted interpretation Ἀριάδνη is simply the Cretan dialectic version of Ἀριάγνη. (Hesych. *ἀδνόν, ἁγνόν*, Κρῆτες.) This connexion is valuable as pointing to colonists from Crete itself.

[2] Paiôn of Amathus, in Plutarch, *Theseus*, c. 20.

[3] Plutarch, *Theseus*, c. 21, who cites Dikaearchos for the name of *Geranos*, Pollux, iv. 101.

[4] Pausanias, ix. 40. 3.

[5] Plut., *op. cit.*, c. 21 Ἐχόρευσε *μετὰ τῶν ἠϊθέων χορείαν, ἣν ἔτι νῦν ἐπιτελεῖν Δηλίους λέγουσι, μίμημα τῶν ἐν τῷ Λαβυρίνθῳ περιόδων καὶ διεξόδων, ἔν τινι ῥυθμῷ περιελίξεις καὶ ἀνελίξεις ἔχοντι γιγνομένην.*

[6] See Vol. i, p. 2.

It seems possible that the change came about through Greek assimilation and adaptation of the old ceremonial dance, in the course of which much that had belonged to Ariadnê was transferred to her male consorts—to Theseus or, again, together with the Theatre itself, to Dionysos.

Traditional Dances of Cretan Peasants.

Cretan peasant dances.

In its adapted form at any rate a very fair idea of the original 'mazy' dance may be obtained from the dances still performed in the neighbourhood of Knossos itself and elsewhere by the Cretan peasants, who have a quite extraordinary gift for this art, certainly unrivalled in the rest of Greece. Competent judges, indeed, place these Cretan performances in the highest rank of European folk-dancing.

Both in the 'orchestra' of the Theatral Area, as already mentioned, and with wider scope in the Palace courts themselves, dances were organized of our Cretan workmen and their womenfolk on several festal occasions. In Fig. 42, part of a chain of dancing villagers[1] is shown, the leader of whom is seen to the left with raised foot while within sits the player of the *lyra* with a friend beside him.

Kastrinos.

Of the Cretan dances, those of the Candia district and of the adjoining Malevizi province—the *Καστρινός*[2] and *Μαλεβιζώτικος* are the most elaborate and graceful. At the same time, though the motion is rapid, a certain dignity is preserved throughout. A kindred form, the *Σιτιακός*, occurs in East Crete. This is a 'seven-beat' dance, but to the West we find the *Πεντοζάλης*, with a 'five-beat' rhythm. In these dances both men and women take part together. But in the village of Anoja, situated on a Northern spur of Mount Ida, where primitive customs and costumes have been preserved in an exceptional degree—the opening dance at weddings is performed by girls alone, the bride leading. Here, too, at times, the girls dance what is known as the *μυστικὸς χορός* or 'secret dance' in a house by

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[1] Of Katalagari, inland of the site of Knossos.

[2] From the Romaic name of Candia, Μεγάλο Κάστρο. The modern inhabitants have renamed the town—on the basis of a very uncertain identification with an obscure seaport of Knossos—'Herakleion'.

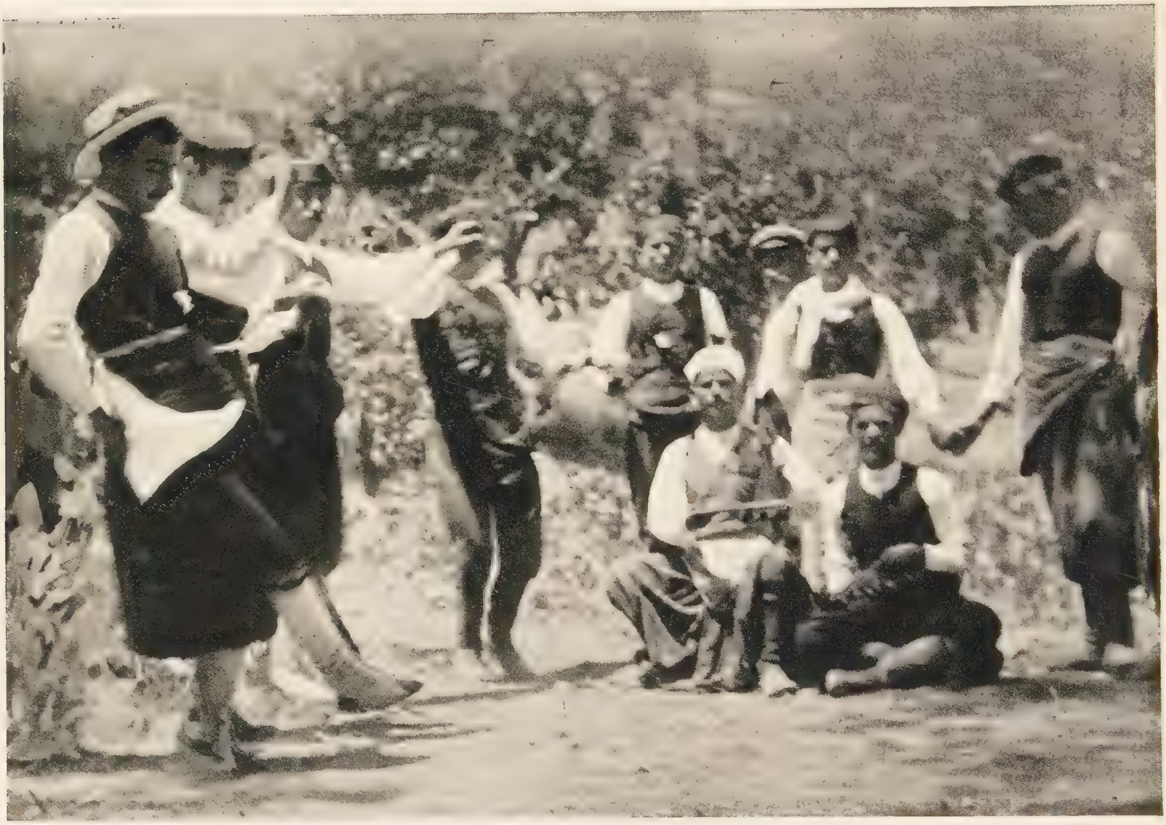

Fig. 42. Peasants dancing *Kastrinós*: Central Figure playing *Lyra*: Knossos District.

Secret dance of the women.

themselves, played to by a woman on a violin while they sing their special songs (*ἄσματα*), and on these occasions men are rigorously excluded. It would seem, indeed, that a male intruder might share the fate experienced by Pentheus at the hands of Agavê, when he broke in on the secluded orgies of the Theban women amidst the wilds of Kithaeron.

Mazy course of dances.

In all these cases the train of dancers moves from left to right—against the sun or 'widershins'[1]—and follows a sinuous, meandering course, recalling the Delian 'Crane' dance. It curiously illustrates Homer's description of the dancers on the Shield of Achilles, turning backwards and forwards as a potter turns a wheel.[1] The stringed instrument is still known as the *λύρα*, and it is usual for the player of this instrument to be given a stool in the middle of the circle of dancers. This modern 'lyre' is very simple as compared with the Minoan forms (Fig. 44 at end of Section), having only three strings instead of seven or eight. These dances are not strictly speaking 'ring-dances'—such as the terra-cotta model described above from Palaikastro seems to suggest, or such as may be witnessed still in the Slavonic 'Kolo' or 'wheel-dance'—but, rather, 'chain-dances' such as the early Greek, in which the leader and his companion take a very prominent part. In some cases in the West of the Island the dancers do not actually touch hands but are linked by means of kerchiefs.

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[1] Never, as in Melos, from right to left with the sun.

All 'chain-dances'.

Πηδικτὸς χορός.

In the *Πηδικτὸς χορός* common on the Northern side of Mount Ida where the dancing is of a rougher and more primitive kind than in the towns, with comic touches, the saltatory character of the performance presents a curious conformity with Homeric tradition. The two men who lead the chain of dancers leap about before them with surprising agility, often presenting acrobatic feats of great skill. The strength of some of the leaders is at times very great, and it is not an uncommon experience to see one of these spring up and set one foot on the palm of the second in the file, on which he is raised aloft and, after turning a somersault in the air, lands on his feet. These certainly recall the two *κυβιστητῆρε* of the *Iliad*,[2] who accompanied and, in a way, led the ring-dance with their tumbling-feats and gyrations. The Cretans still retain their ancient fame[3] for tumbling as well as dancing. On Minoan monuments their acrobatic skill receives an extraordinary illustration from the scenes of the bull-ring to be described below.

Tumbling performances as Homeric

'Leaping dance' of Cretan Apollo.

It is this 'leaping dance' of which we already find a record in the Homeric Hymn[4] where Apollo of the Dolphin leads his Cretan crew towards his Pythian sanctuary, who stamp the ground to the strains of his *kithara* and sing native paeans in his honour.[5] The Muse still 'sets sweet songs in

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[1] *Il.* xviii. 599 seqq.:

Οἱ δ' ὁτὲ μὲν θρέξασκον ἐπισταμένοισι πόδεσσιν
'Ρεῖα μάλ', ὡς ὅτε τις τροχὸν ἄρμενον ἐν παλάμῃσιν
'Εζόμενος κεραμεὺς πειρήσεται, αἴκε θέῃσιν·

[2] *Il.* xviii. 603 seqq.:

πολλὸς δ' ἱμερόεντα χορὸν περιίσταθ' ὅμιλος
τερπόμενοι· δοιὼ δὲ κυβιστητῆρε κατ' αὐτοὺς
μολπῆς ἐξάρχοντες ἐδίνευον κατὰ μέσσους.

It is to be observed that in the ancient dance as here described, the 'tumblers' perform in the middle of the ring of dancers. In the Cretan *πηδικτός* the leading is more direct.

[3] Athenaeus, v, p. 181 b *τοῖς μὲν οὖν Κρησὶν ἥ τε ὄρχησις ἐπιχώριος καὶ τὸ κυβιστᾶν.* Pashley, *Travels in Crete*, i, p. 245, gives some modern instances of the skill of the Cretan tumblers.

[4] *Hymn to Apollo*, 516 seqq. (see *P. of M.*, ii, Pt. II, p. 841).

[5] *Ibid.* *Οἱ δὲ ῥήσσοντες ἕποντο*
Κρῆτες πρὸς Πυθὼ καὶ ἰηπαίηον' ἄειδον,
οἷοί τε Κρητῶν παιήονες, οἷσί τε Μοῦσα
ἐν στήθεσσιν ἔθηκε θεὰ μελίγηρυν ἀοιδήν.

'Siganós' and choral accompaniment.

The 'Matinadas'.

the bosoms' of the Cretan dancers, but the longer chaunts usually accompany a slower form of the dance known as the *σιγανός*. These choral songs may in part represent a survival of the *ὑπορχήματα* which Lucian speaks of as specially Cretan lays, sung to the lyre in the sacred dance of Delos.[1] Such a song—often of impromptu composition, allusive, topical, with capping of rhymes and clever transitions of subject—is known to the modern Cretans as *ματινάδα*. The word itself is borrowed from the Venetian *matinata*,[2] since they often begin after the morning Celebration, especially after marriages. At times, too, the festivities that they accompany begin after Vespers or, at Easter, after Midnight Mass, and owing to the gentle motion of this particular form of dance both the lays and the dancing are often kept up well into the small hours of the morning.

The 'Dancing Ground' of Ariadnê.

It is clear that, whether we take Aphroditê Ariadnê herself or the Sacred Grove and Tomb at Amathus or the 'Crane' dance and horned altar of Delos, they are but reflections of the earlier aspects of the cult of the Minoan Goddess such as we find it in Knossos. Nay more, in the walled enclosure of the Miniature Fresco and the ceremonial dance enacted within it may we not recognize a living presentment of the actual 'Dancing Ground of Ariadnê, wrought by Daedalos in 'broad Knossos' according to the Homeric tradition? In other words, have we not here the famous *χορός* which Hephaestos chose as a model for that upon Achilles' shield?—

τῷ ἴκελον οἷόν ποτ' ἐνὶ Κνωσῷ εὐρείῃ
Δαίδαλος ἤσκησεν καλλιπλοκάμῳ Ἀριάδνῃ,

The walled enclosure with the dancing women, of which we have here a fragmentary glimpse, must surely represent some space artificially prepared for such a purpose.

Its probable position and character as illustrated by fresco.

That this space was not simply one of the Palace Courts is clear, from the fact that it was not bordered by buildings but by an olive grove rising on a slope, in the shade of which the crowds of spectators stood or sat. We may infer perhaps, from the fresco composition that, whatever artificial element may have existed in the 'Dancing Ground', it was largely supplemented by the natural features of the site. In this respect the arrangement, as far as we can judge, was much less artificial than the associations of the arena devoted to the bull-grappling and other sports, as illustrated by the Grand Stands and Columnar Shrine of the companion piece. Here at most we see a low isodomic wall bordering the *orchēstra*, and another apparently running diagonally from it, while the top of a third wall appears in one place above the spectators. The dancing floor itself may on the other hand have been well paved. That it was placed in the immediate neighbourhood of the great Palace may be reasonably assumed, and an ideal location for it may well be found on the river flat overlooked, above an intervening bank, by the Eastern walls of the Palace. On the borders of this, again, a little

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[1] Lucian *περὶ ὀρχήσεως* c. 16, says of the Delian sacred *χορός*: *τὰ γοῦν τοῖς χοροῖς γραφόμενα τουτοῖς ᾄσματα ὑπορχήματα ἐκαλεῖτο καὶ ἐμπέπληστο τῶν τοιούτων ἡ λύρα.*

[2] Pashley, *Travels in Crete*, i, p. 246 seqq., who has preserved a song of this kind, strangely proposes to derive '*μαδινάδα*' (as he writes it, though the Cretans take over the Venetian *t*) from *ὁμάδι*, a gathering. But the word itself is unquestionably the Venetian '*matinata*'. Bearing in mind the large Venetian leaven in Crete it is reasonable to suppose that these compositions themselves are partly due to Venetian influence. The influence of love epics like Erôtokritos suggests a reflection of Tasso.

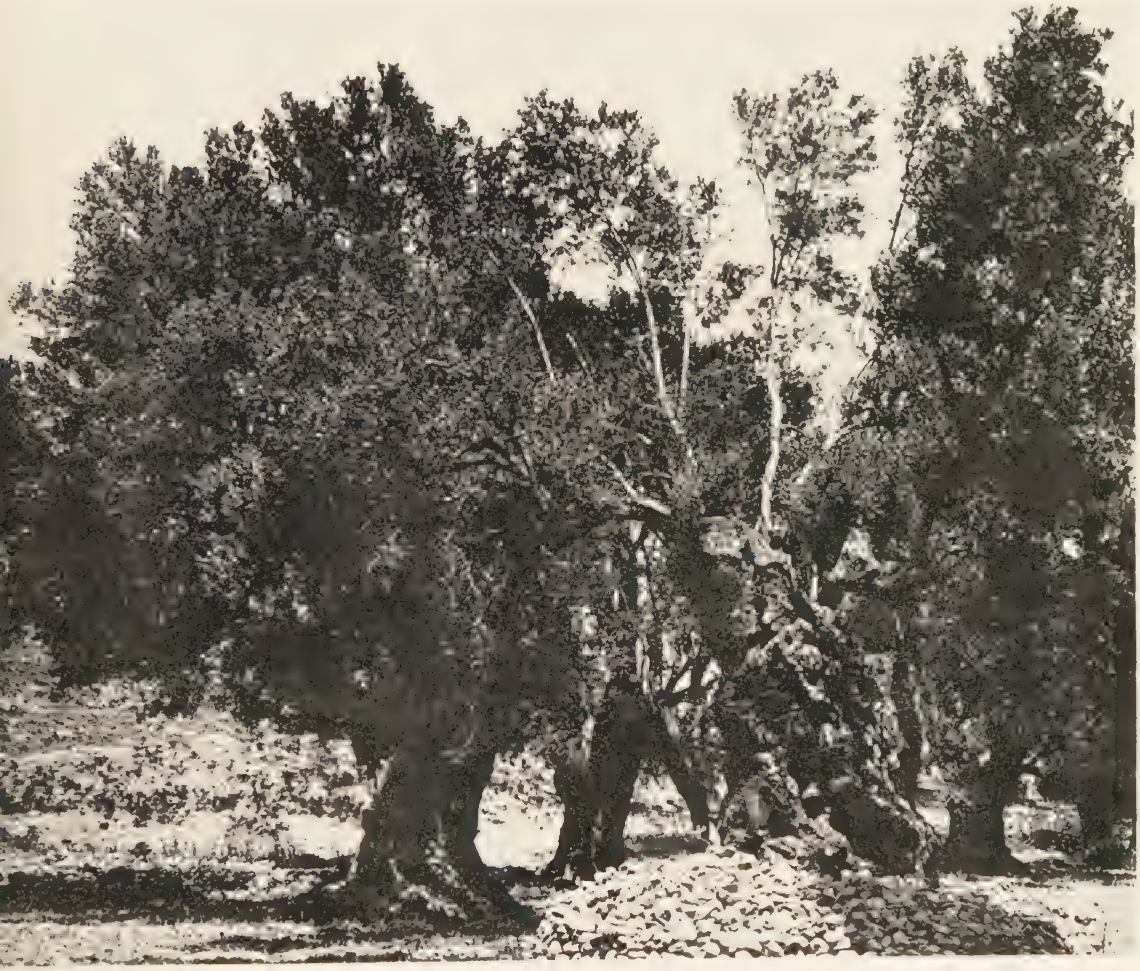

FIG. 43. OLD OLIVE-TREES BENEATH EAST PALACE SLOPE.

to the North, stood the 'Royal Villa' the special amenities of which beside this well-watered glen have already been described.[1]

Level spot with old olives beneath E. slope of Palace.

Diluvial changes, in some cases due to exceptionally destructive floods—such as in places have rolled great tree trunks and rocks over a wide space beyond the actual river-bed—make it hopeless to recover on the flat itself the enclosure once, no doubt, skilfully laid out as a dancing floor by the Minoan architect of whom Daedalos in this case inherited the fame. But the borders are still overgrown with fine olive-trees, their gnarled trunks divided above but of a girth below that tells of great age.

Convenient access to this spot was secured in Minoan times by a postern gate and staircase leading directly down from the Central Court to the East Bastion. Over the lower slope, where the remains of the Palace walls still stand, line behind line, and the steep bank below them—in which protruding blocks may be here and there detected—the evening shades creep early. Often enough, indeed, they tempt some little shepherd, homeward bound with his goats from the neighbouring hamlet, to seek a short refuge here from the outer glare while he plays a strain of old-world music on his native pipe.

The magic of the spot.

Those eerie notes can hardly fail to wake more distant echoes in the listeners' ears and the magic of the spot calls up visions of the festal scenes once enacted on the level flat below—shut in, beyond, by the murmuring stream—where the immemorial olive-trees still spread their boughs. Fitfully, in the early summer, there float and poise in the sunny spaces between the trees swallow-tail butterflies, saffron, fringed with blue, like the robes of the dancers on the fresco, as if they were in truth the 'little souls' of those gay ladies.

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[1] *P. of M.*, ii, Pt. II, p. 410 seqq.

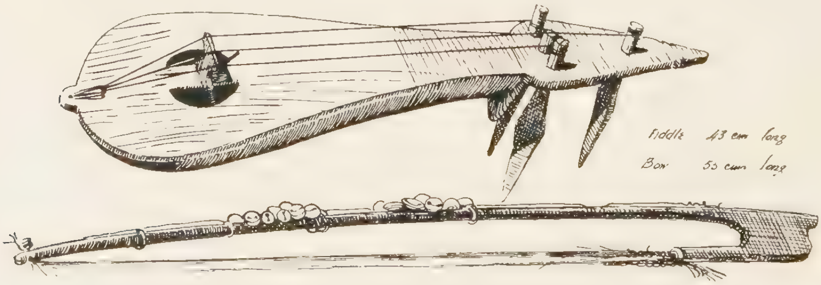

Fig. 41. Cretan *Lyra*: Anoja District.

§ 72. THE MINIATURE FRESCOES: 3. FRAGMENTS OF SIEGE SCENES AND ANALOGIES SUPPLIED BY THE MEGARON FRIEZE AND SILVER 'RHYTON' OF MYCENAE: EGYPTIAN PARALLELS.

Miniature Frescoes depicting Siege Scenes; Antiquity of theme in Egypt and Crete; Warriors hurling javelins on Knossian fragment; Youthful Spearman; Fragment of building, probably belonging to same subject; 'Sacral horns'—not confined to Shrines; Female figures visible in opening beneath entablature; Correspondence of structure with faïence House fronts; The Megaron Frieze at Mycenae—scenes of assault; Warrior precipitated in front of wall—prototype of Kapaneus; Analogies from Egyptian siege scenes; House façade on crystal tablet—obliterated by workman; Section of outer wall on Tylissos fresco; The Silver 'rhyton' with Siege Scene from Mycenae Shaft Grave; graphic character of design; Historic import; Restoration of 'rhyton' in conical form; Continuous design—land, sea, and conventional reticulation for shallows; The besieged City—its gate and towers—Minoan character; Separate fragment with 'superposed pillars' and 'Sacral horns'; Non-Minoan element, however, among inhabitants; Shields of Minoan type; Shock-haired natives within the walls; Friendly native allies, some arriving by sea; Shipwreck and sea monster; Hostile barbarians with primitive weapons—stones, throwing-sticks, and clubs; Native 'friendlies' better armed; Minoan element among defenders—warriors in boat; The relief a historic record; Topographical data; Presumptions in favour of Anatolian Coast; Slings typical Asianic weapons; Clubs also traditional; Archers paralleled by Knossian small relief; Pictorial style, akin to that of Miniature Frescoes; Anticipations of Scenes on Shields of Achilles and Herakles; Besieged stronghold traditional in Egypt—example from Fifth Dynasty Tomb of Anta—its dramatic character; Middle Empire examples; Sensational versions of New Empire; Was there a Minoan reaction on Egypt? Cretan Miniature Art supplies link between Early Egypt and Epic tradition.

'Miniature Frescoes' depicting siege scenes.

AMONG the 'Miniature Frescoes' derived from the little Corner Sanctuary described above, certainly the most important in their historic relation is a small group of a warlike character, implying, it would seem, an attack on some fenced city.

We have not here the same elements for reconstructing a connected design as in the case of the former subjects illustrative of festal and ceremonial occasions. But there is sufficient comparative evidence available to show that these fragmentary remains had formed part of the same kind of composition as that already represented by the earlier Town Mosaic, the theme of which, in one shape or another, was the 'Beleaguered City.'[1]

Antiquity of the theme in Egypt and Crete.

It is a theme already old in Egypt before the close of the Early Kingdom, later versions of which were traditionally set forth on the shields of Herakles and Achilles, and immortalized in the Tale of Troy. Neither in the case of the faïence mosaic, nor in the 'Miniature' fresco fragments before us, have we more than a hint of the special manner in which the artist dealt with this time-honoured subject. Happily, however, we have at hand in the small reliefs of the silver 'rhyton' from the Fourth Shaft-Grave at Mycenae a much fuller source from which to draw for at least one version of the siege of a Minoan stronghold. Other somewhat later analogies are supplied by the frieze of the Mycenae Megaron.

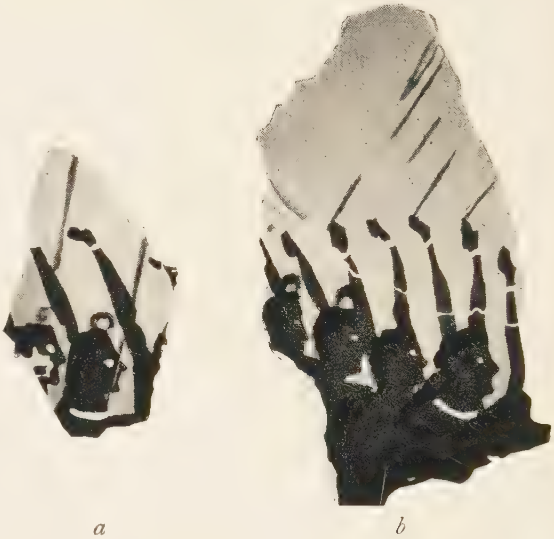

Fig. 45. Warriors hurling Javelins; Miniature Deposit, Knossos.

Warriors hurling javelins.

Among some small disconnected pieces depicting the upper outlines of serried ranks of warriors, two against a blue ground are shown in Fig. 45, *a*, *b*. It will be seen that they are hurling javelins upwards, as against enemies on battlements above.[2] The javelins are painted orange which, however, need not imply that shafts as well as heads were of bronze. Some seem to be already thrown and to be flying through the air. The warriors' heads show well-marked curving crests of hair; they wear, as usual, some kind of necklace or torque, and the upper outlines appear on Fig. 45, *b*, of the heads of two more warriors belonging to a second file[3]. As in the case of the male spectators in the scenes already illustrated, it is clear that the troop to which they belong was in dense formation—an arrangement, moreover, which suited the 'shorthand' method of the Miniature fresco painter. A separate figure of a youthful warrior resting his left arm on a spear is depicted in Fig. 46 on a slightly smaller scale, against a white ground. His long locks of hair, which fall over both shoulders, descend almost to the knees in front, and a clear white field is seen before and behind him on the fragment presenting this design. In the restored sketch,[1] Fig. 46, he is made, in accordance with the slight indication preserved, to raise his right hand, like an officer giving some command to his troop. In some respects his attitude resembles that of the 'Young Prince' on the Hagia Triada Cup.[2]

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[1] See *P. of M.*, i, p. 301 seqq. and p. 314.

[2] The importance of this feature was already noted in my first Report (*B. S. A.*, vii). The silver 'rhyton' from Mycenae was there cited, but neither the 'Town Mosaic' nor the 'Megaron Frieze' of Mycenae had been yet discovered.

[3] Owing to damage due to the Earthquake the traces of these have mostly disappeared. Two fragments of the scene are now missing.

Youthful spearman.

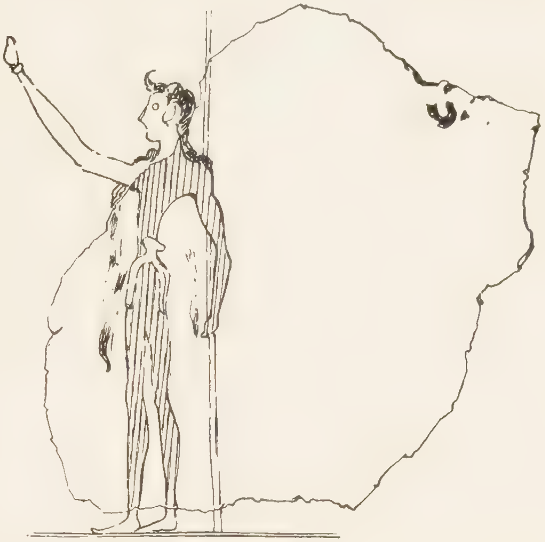

Fig. 46. Miniature Fresco Figure of Youthful Officer; Miniature Deposit, Knossos.

In addition to the fragments displaying light-armed troops—who may compare with the spearmen and bowmen of the earlier 'Town Mosaic'—there must be also, in all probability, assigned to this composition a fragment, Fig. 47, belonging to an architectural subject, but which does not seem to have any connexion with the companion panels. This, indeed, was at one time thought to supply a missing section of the entablature of the central compartment of the little 'Temple' between the Grand Stands as seen in the Coloured Plate XVI. The sacral horns above, the general coloration, the intervening white band, and the red and yellow bars of the border above are obvious points of correspondence. But, as already shown, this identification with the missing section of the Shrine cannot be maintained,[3] and there is every reason to suppose that the entablature of its central compartment corresponded with that of its wings. Nor, as a matter of fact,

Fragment of building: probably belonging to same subject.

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[1] By Monsieur E. Gilliéron, fils.

[2] See *P. of M.*, ii, Pt. II, p. 791, Fig. 516.

[3] In my original publication in *Myc. Tree and Pillar Cult* (*J. H. S.*, xxi, 1901, p. 193, Fig. 66) the entablature of the central *cella* of the little Temple was rightly restored. In the first reconstitution of the fresco by Monsieur Gilliéron, père, the fragment, Fig. 47, was introduced. The error, exposed by Dr. Rodenwaldt, has been corrected in the revised restoration of the fresco in the Candia Museum. The Coloured Plate XVI also shows the proper reconstruction of the entablature.

Sacral horns not confined to shrines.

do the sacral horns on the upper coping of the present fragment by any means necessarily imply that it formed part of an actual shrine. There is more than one indication that the copings of the Palace walls were set with similar horns. The remains of the great limestone 'horns' found below the old S.W. angle of the building had doubtless fallen from its exterior line on that side;[1] a smaller stucco example from the N.W. corner of the Central Court[2] was clearly derived from the edge of an interior roof-terrace.

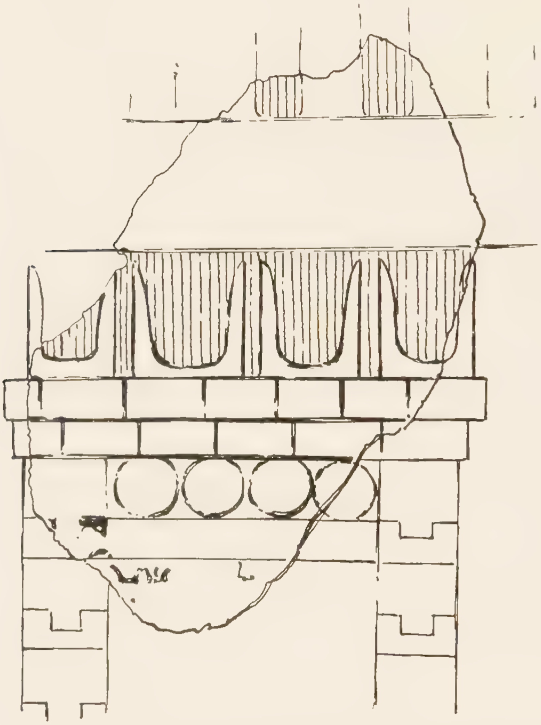

Fig. 47. Architectural Fragment from Area of 'Miniature Frescoes'.

Sacral horns could mark any residential building belonging to a Minoan lord who also performed sacerdotal functions. In the case of the siege scene on the Mycenae 'rhyton'—very important in connexion with the present subject—it will be shown below[3] that one particular part of the fenced city there depicted bore a religious character, and exhibits the consecrating horns upon its walls.

If, as it seems reasonable to suppose, the little 'Temple' formed the centre-piece of the composition in which it occurs, with the 'Grand Stands' ranged symmetrically on either side, no room is left in the design for another similar structure. An important feature observable in the architectural fragment reproduced in Fig. 47, is indeed incompatible with the idea of its representing one of the usual columnar shrines. There are here in fact traceable beneath the entablature, certain black outlines which unquestionably denote female locks. After a careful re-examination of the visible traces, Monsieur Gilliéron, fils, has restored within the opening a group of female heads (see Fig. 48, *d*). This arrangement calls to mind a simpler analogy in the house-front of the 'Megaron Frieze' at Mycenae, where large single heads of women appear at the windows (Fig. 48, *c*).

Female figures visible in opening beneath entablature.

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[1] *P. of M.*, ii, Pt. I, pp. 159, 160, and Fig. 81.

[2] See Vol. IV.

[3] See below, p. 92 and Fig. 51.

The setting of the entablature shown in Fig. 47, immediately under the upper border of the frame, enables us, moreover, to infer that it represented the highest part of a building of the same character, with a central prominence —a typical Minoan pattern of wide application.

Correspondence of structure with 'house-fronts'. Designs from 'Megaron frieze', Mycenae.

This is the prevalent form in 'House Tablets' of the faïence mosaic, and it is interesting to note that the façades of the buildings of which we have the fragmentary remains in the 'Megaron Frieze' of Mycenae, and which there form part of a later version of the scene of the 'Beleaguered City', may be regarded as a survival of the same type. Thus the house, restored by Dr. Rodenwaldt, and reproduced in Fig. 48, *c*, seems to be evolved in its main features, such as the quadruple grouping of its windows as well as its upper projection, from the simpler version supplied by the 'House Tablet', Fig. 48, *c*. The rows of disks again on this Mycenae façade are constantly repeated in the faïence tablets. These disks, a constantly recurring feature in Minoan architecture, are in most cases merely a decorative and superficial reminiscence of the round beams that supported floors and roofs, and are often shown where no beam ends could really be.

It is worth noting that the columns in the window openings of the wings of the Mycenae façade, Fig. 48, *c*, with their 'mid-wall shafts', have now found a parallel in those of the tower-shaped terra-cotta stand from Gournià, belonging to the close of the Knossian Palace period (L. M. II).[1] This tower, which seems to belong to the castellated style, including round turrets, illustrated by the Zakro sealings,[2] is surmounted by sacral horns. The Mycenae façade, on the other hand, which is connected with a battle-scene, is without them. But, as pointed out above, the horns appear in part of the structures depicted in the siege scene of the Mycenae 'rhyton', and their presence on the façade, of which a part was preserved among the 'Miniature Frescoes', cannot be taken as a proof that it did not belong to a town which was the object of hostile attack.

As shown in Fig. 48, *d*, this façade is otherwise most naturally restored on the lines of that from the 'Megaron Frieze'—the large single heads of women being here, as we have seen, replaced by the heads of whole groups of female onlookers.

In the military movements connected with the 'Megaron Frieze' at Mycenae,[3]

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[1] *P. of M.*, ii, Pt. I, p. 139, Fig. 70 *bis*.

[2] See *P. of M.*, i, p. 308, Fig. 227, *a*, *b*.

[3] See G. Rodenwaldt, *Fragmente Mykenischer Wandgemälde* (*Ath. Mitth.*, xxxvi, 1911, p. 222 seqq.) and *Der Fries des Megarons von Mykenai*, and, for the additional material excavated by the British School, Miss W. Lamb, *B. S. A.*, xxv, p. 214 seqq., Plates XLII, XLIII, and restored Section in Pl. XXVII. For the fragments originally found by Tsountas in 1886 see Ἐφ. Ἀρχ., Pl. XI (*Πρακτικά*, 1886, p. 73).

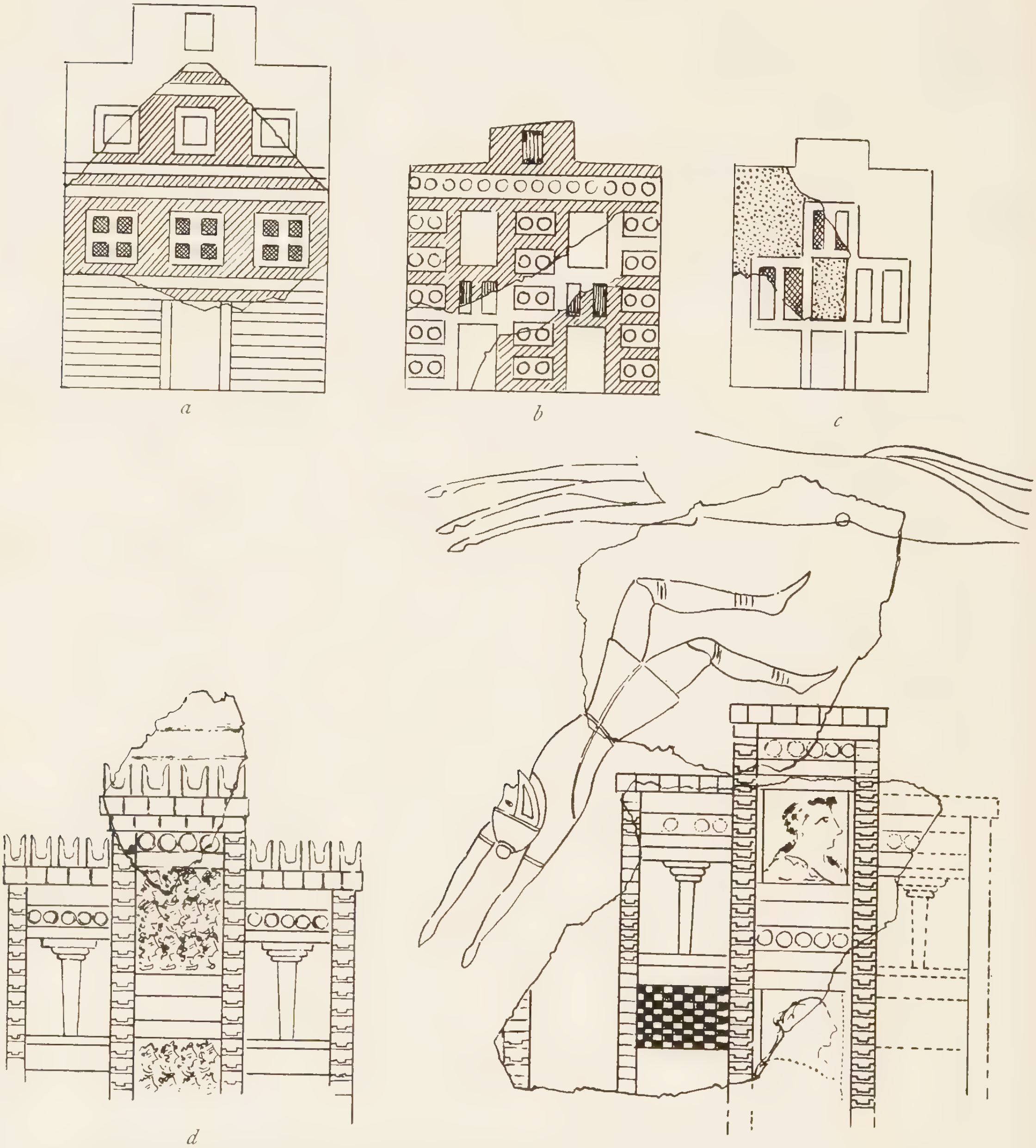

Fig. 48. Comparative View of Minoan House Façades with Central Prominence. *a–c*, Faïence Tablets; *d*, Restoration of Fragment from Area of 'Miniature Frescoes'; *e*, Restored Fragments of 'Megaron Frieze', Mycenae.

the warriors present a considerable contrast to those of the Miniature fragments from Knossos. These, too, hold spears or javelins, but they are clad in short tunics in the Mainland fashion, and wear peaked helmets, Megaron frieze connected with scenes of assault.

certainly of leather, for they are strengthened with rows of boars' tushes,[1] and with cheek-pieces attached. Neither here, nor in the other case, do the warriors bear shields, but they wear gaiters on their legs. On this later work they are associated, however, with chariots and horses, the manes of the horses being tied up in tufts in a manner identical with those on the inscribed clay tablets of Class B belonging to the concluding phase of the Knossian Palace. It is probable, though owing to the fragmentary nature of the materials the evidence as to this is wanting, that the chariots were of the later 'dual' class[2] shown on the tablets, in which there is a posterior extension of the body, its framework resembling a spanned bow fitted with an arrow.

Warrior precipitated in front of wall—a prototype of Kapaneus.

Analogies from Egyptian siege scenes.

On one section of the Mycenae frieze a warrior is seen in the act of falling before a building (see Fig. 48, *c*), while traces of a chariot horse appear above. Rodenwaldt has appositely compared the falling warrior with one seen below a chariot in a relief of the battle of Kadesh (Rameses II).[3] This precipitate fall—into space, as it were—may, however, be itself of still more ancient tradition, since the incident of figures falling from battlements and walls already appears on Egyptian versions of siege scenes.[4] The episode recalls that of Kapaneus struck down from his ladder by the bolt of Zeus when he sought to scale the wall of Thebes.[5]

The 'Town Mosaic', so far as Minoan Art is concerned, supplies the prototype of the subject of the 'Beleaguered City'. It dates from the close of M. M. II *b*, or the very beginning of M. M. III *a*.[6] But an important though evanescent piece of evidence tends to show that similar inlaid compositions in more precious materials continued to be reproduced to the close of the M. M. III Palace.

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[1] There is sufficient evidence that helmets fitted with boars' teeth also existed from an early date in Crete; cf. A. E., *Prehistoric Tombs, &c.*, p. 67.

[2] See my remarks on the evolution of the Minoan chariots, *Ring of Nestor, &c.*, p. 32 seqq. (*J. H. S.*, 1925).

[3] G. Rodenwaldt, *Fries des Megarons von Mykenai*, pp. 55, 56 and cf. Rosellini, *Mon. dell' Eg.* I, Pt. ii, Pl. CIII.

[4] See below, p. 104 and Fig. 58.

[5] Such is the pictorial effect. One recalls the relief on an ash-chest of Volterra on which Kapaneus, grasping his ladder, falls in front of the local Porta dell' Arco, substituted there for Electra's Gate at Thebes. But it is possible that the Mycenae fresco painter in his own mind connected the falling figure with the war-chariot of which we have traces in the upper zone.

[6] *P. of M.*, i, p. 305, and cf. pp. 301, 302. It is there recognized that the 'House Tablets' lay in a somewhat ill-defined deposit that might belong either to the M. M. II *b* phase or to M. M. III *a*—a small vase of which period was certainly found in the same deposit. In any case architectural details on these tablets fit on closely to those of the early 'Terra-cotta Shrine', the date of which from its association must certainly fall within the limits of M. M. II *b* (see *op. cit.*, i, pp. 305, 306).

House façade on crystal tablet.

Among debris excavated beneath the South-West Palace Angle, not far from the borders of the 'South House', and resulting, probably, from the great seismic disturbance towards the close of M. M. III *b*, a workman brought out an oblong plaque of rock crystal which he handed over for my observation. It was about the size of the smaller of the 'House Tablets', and, on its underside, painted in very fine black outlines on a white ground, was visible the façade of a building with isodomic masonry resembling one of the house-fronts of the 'Town Mosaic'. The finder took it out of my hand to place it temporarily with other small finds from the same deposit on a neighbouring block, but before setting it down, gave the object a vigorous rub between a horny finger and thumb 'to clean the glass' as he expressed it. It was effectually 'cleaned' and the house obliterated!

Oblite-rated by workman.

Section of outer wall on Tylissos fresco.

In addition to the remains of Miniature frescoes from Tylissos, already referred to as relating to a pugilistic show, there are two unpublished fragments from that site placed with them in the Candia Museum, and which seem to belong to one another, that deserve mention in the present connexion (Fig. 49). These exhibit a building of isodomic masonry and rectangular construction, including traces, on its extreme border, of a window with several cross-bars. This does not seem to be designed for spectacular purposes like those of the Grand Stands, but may more naturally be regarded as belonging to a house forming part of an outer wall of a stronghold. It is evident that there must have been an upright post on the right of the barred opening. It is curious, however, that it should have been at the angle of the wall.

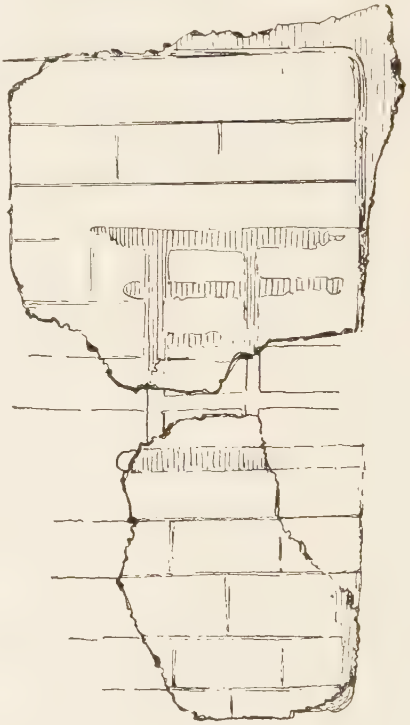

FIG. 49. PART OF BUILDING, TYLISSOS.

We may reasonably conclude that, as at Knossos, both these subjects belong to a composition illustrating in one form or another the time-honoured theme of the besieged City.

Silver 'Rhyton' with Siege Scene from the Fourth Shaft Grave at Mycenae.

Silver 'rhyton' with siege scene from Mycenae.

But much the most complete view of such a beleaguered stronghold is to be seen in the repoussé reliefs of the tall silver 'rhyton' from the Fourth Shaft Grave at Mycenae. Incomplete as it is, this vessel—in all probability imported from a Knossian *atelier*—has supplied much the most 'historic' representation to be found in the whole range of Minoan Art.

Graphic character of design.

This is not a conventional version of a traditional idea of a siege scene in general, but a record of somewhat complicated episodes, either actually witnessed, or as graphically described in some epic source. We obtain both ethnographic and geographical items of information, with side incidents such as the shipwreck and the appearances of the 'sea dog' among the swimmers. We see before us the barbarian attack on a civilized settlement inadequately garrisoned, with every kind of dramatic contrast—naked or half-clad warriors on the one side on a rock-girt shore, on the other a hill city, displaying Minoan architectural features, with fashionably dressed ladies looking forth from its battlements. This is a historic piece in the modern sense. The sensational incidents and picturesque local touches are very much those that a special artist of our own day might seize upon, who had accompanied an expeditionary force sent out to relieve the pressing need of some Colonial outpost threatened by a native rising.

Historic import.

The silver vase-fragment from this Grave,[1] representing part of the beleaguered hill city and its defenders, was found to stand in relation to other pieces of the same vessel.[2] The reliefs themselves are executed in repoussé work on silver plate, and had been previously sketched in with incised lines that do not always correspond with those of the finished design.

Restoration of 'rhyton' in conical form.

Remains of the pointed extremity of the vase clearly proclaimed it to be a 'rhyton'. Parts of the gold-plated bronze rim, with shield-shaped bosses below it similarly plated, on being pieced together were seen to stand in relation to a curved handle, also of plated bronze, that rose from it, like that of the tall conical 'rhyton' of steatite found at Hagia Triada, exhibiting bull-grappling and boxing scenes. Unfortunately, however, this obvious parallel was not perceived by the then Director of the Museum, Dr. V. Stais, when, on the basis of the existing fragments, he carried out a restoration of the vessel, though he rightly recognized it as belonging to the 'rhyton' class. It thus emerged from the restorer's hands as a bulging and lop-sided funnel,[1] both uncouth and un-Minoan, and in its 'telescoped' form incompatible with the development of its figured designs.

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[1] This fragment was not described by Schliemann, owing to the bad condition of the surface. The reliefs were first noticed by Kumanudes, and a drawing of the design when cleaned at the Athens Museum executed by Monsieur E. Gilliéron, père, was first published by Tsountas, Ἐφ. Ἀρχ., 1891, Pl. 2. 2 and p. 11 seqq., but the lithographic copy is unfortunately inaccurate.

[2] Three additional pieces were published by W. Reichel in his work *Ueber Homerische Waffen* (1894 ed.), p. 143, Fig. 17, *b*, *c*, *d*; 2nd ed., p. 164 and p. 13. One of these (*b*) is that shown in the middle space of Fig. 50, *c*; another (*d*) is the uppermost portion of Fig. 51 below. In another (17 *c*) Reichel thought that he made out part of a horse and chariot, but this has not since been recognized. Some confusion with the scale work—of which Reichel was unaware—may have here misled him.

That the vessel belonged to the elongated conical class of 'rhytons' could not be doubted and, at my request, Monsieur E. Gilliéron, fils, executed with his usual skill and acumen the restored drawings here for the first time reproduced[2] (Fig. 50, *a*, *b*, *c*). The body of the vessel is 33·5 centimetres high (13¼ in.), and has a diameter of 13 cm. at the mouth. The H. Triada example is *c.* 42 cm. high and 15 cm. wide at the mouth. In the method of applying the decoration the silver 'rhyton' stands by itself. In the latter case and that of other more fragmentary steatite specimens the vessel is divided into zones, each with its separate frieze of reliefs. Here the composition, as far as it is possible to judge, formed one continuous design, starting from the corallines and the reticulated conventional rock-work at its base, and working up, with a wavy coastline and interspaces of open sea, to the purely natural delineation of the central theme—the besieged hill city seen above.

Continuous design: land, sea, and conventional reticulation for shallows.

The contrast between the reticulated relief work, so richly decorative in its effect, that ascends the body of the vase, with the level surface embraced by it that stands for the sea recalls, in a different sphere, the reserved spaces of sky that open behind the variegated over-arching rocks of the 'Blue Bird' fresco.[3] The conventional network itself, symbolical, not only of rocks, but, as we see by the swimmers above it, of the shallow sea, finds an even more direct analogy in the painted design on a pear-shaped 'rhyton' from Pseira,[4] where dolphins appear in the interspaces.

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[1] V. Stais, *Catalogue de la Collection Mycénienne* (1915), pp. 223, 224, and Plate; also *Ath. Mitth.* (1915), p. 45 seqq., and Plates VII, VIII.

[2] The restored drawings (Fig. 50, *a*, *b*, *c*), together with Figs. 51–54, were executed for me (with the kind permission of the late Dr. Stais), by Monsieur E. Gilliéron, fils. I have to thank Mr. A. J. B. Wace, then Director of the British School, Mr. R. M. Dawkins, and Dr. G. Karo of the German Institute for their valuable co-operation in this work.

[3] *P. of M.*, ii, Pt. II, Coloured Plate XI.

[4] *Ibid.*, p. 509, Fig. 312, *f* (Seager, *Excavations at Pseira*, p. 29, Fig. 10).

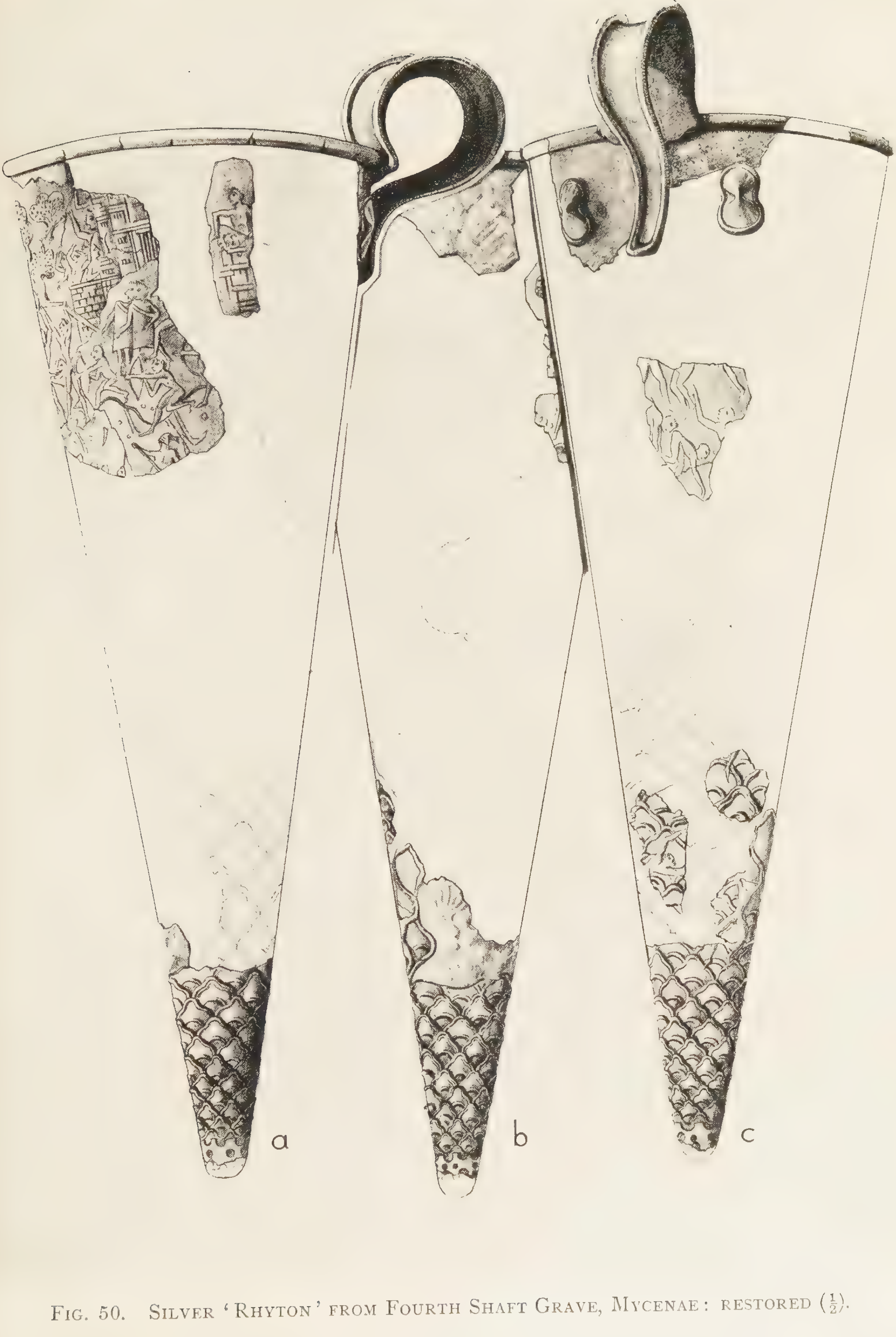

FIG. 50. SILVER 'RHYTON' FROM FOURTH SHAFT GRAVE, MYCENAE: RESTORED ($\frac{1}{2}$).

The besieged City: its gate and towers—Minoan character.

Of the town itself we have now two important fragments, the smaller more recently discovered. That to the right, enlarged to twice its scale in Fig. 52, shows the isodomic outer wall and towers stepping up the slope and a doorway composed of upright trunks, like that of an exterior bastion that appears among the faïence tablets of the 'Town Mosaic'[1]. The group of towers, here seen rising above the walls, at the same time recalls the castellated building on the upward slope and summit of a height, apparently with an outer door and window openings, depicted on a Zakro sealing,[2] though the towers there have a rounded appearance like the terra-cotta round-tower from Gournià.[3] Like the houses of many of the faïence tablets the windows show upright divisions. The slight projection of the coping of the walls is also found at Knossos, and at various points there are traceable the horizontal wooden beams[4] traversing the isodomic masonry—such a characteristic feature in Minoan construction.

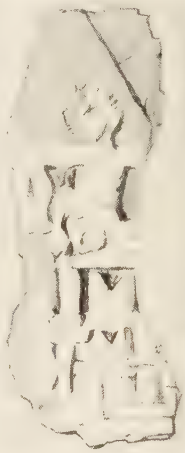

Fig. 51. Fragment showing 'Superposed Pillars' and Sacral Horns.

Separate fragment with 'superposed pillars' and 'sacral horns'.

A more curious parallelism with Minoan architectural forms is presented by the later discovered fragment placed a little to the left of the other in Fig. 50, *a*. Here again we see the upper part of walls with a similar coping, stepping up in this case towards the left. At the same time the superposed pillars with which the walls are associated cannot but recall the typical Minoan arrangement, well illustrated by the Grand Stands of the Miniature 'Temple Fresco' described above,[5] in which a wooden pillar, with an oblong capital of a peculiar kind, finds its prolongation above the architrave in another of the same kind. It is true that in the present instance we cannot trace the upward tapering shape of pillars of this class, but this may very well be due to the diminutive scale of the present reliefs.

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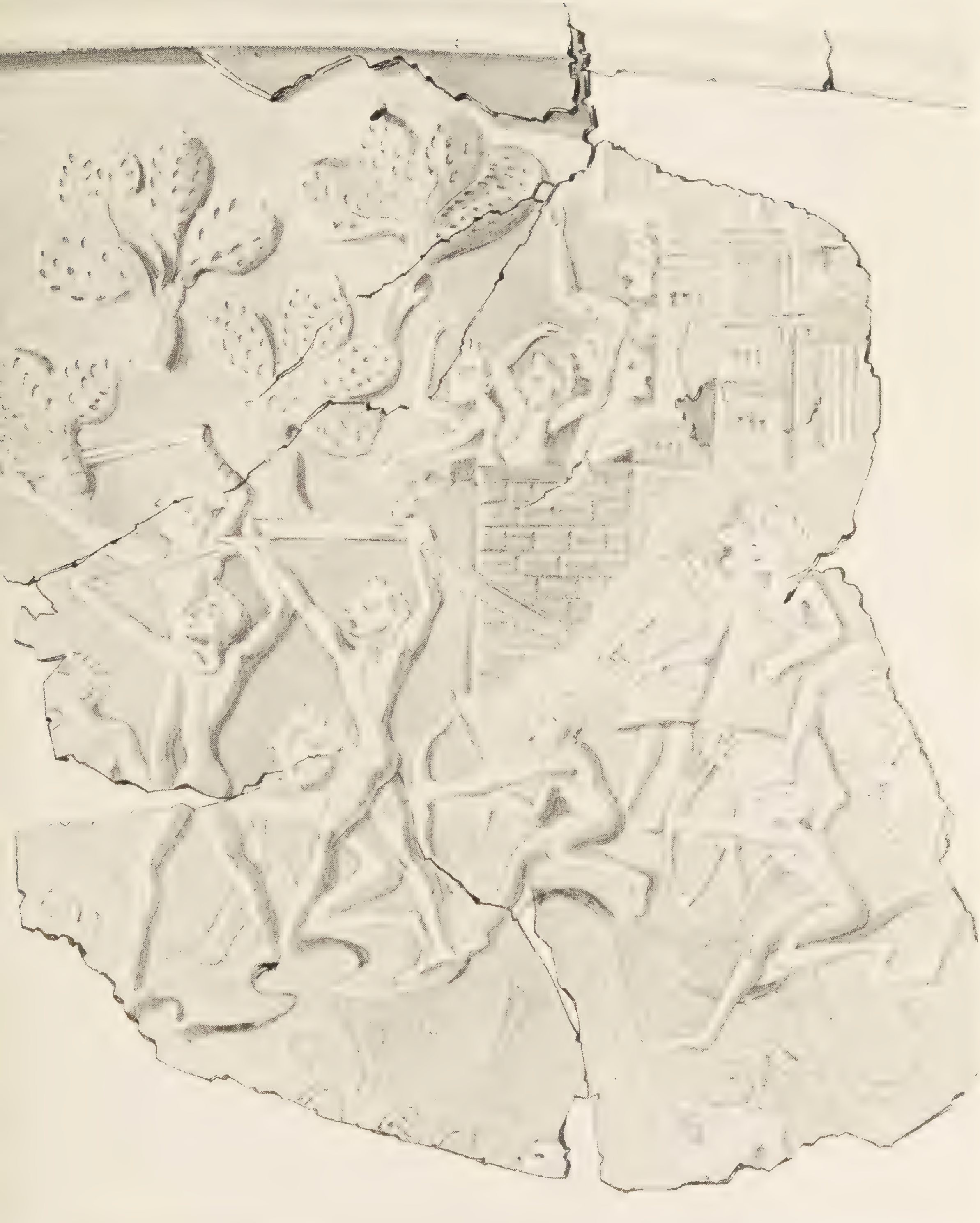
[1] *P. of M.*, i, Fig. 226, 1: facing p. 306.

[2] See *ibid.*, i, p. 308, Fig. 227, *a*.

[3] *Ibid.*, ii, Pt. I, p. 139, Fig. 70 *bis*.

[4] Reichel in his sketch of the large fragment of the siege scene, *Homerische Waffen* (1894 ed.), p. 142, Fig. 17, inserts very definite cross-beams in the bastion on the left. But the very careful drawing made for me by M. Gilliéron, fils, fails to bear this out. Certain horizontal lines, of which there are traces, drawn here across the masonry may be due to some misconception of such beams on the artist's part. In the structures to the right of the bastion the horizontal woodwork s clearer.

[5] See above, p. 47 seqq. and Coloured Plate, and cf. *P. of M.*, i, p. 689.



52. Siege Scene on Silver 'Rhyton' from Fourth Shaft Grave, Mycenae ($\frac{2}{1}$). E. Gilliéron, fils.

The 'superposed pillars' are here set beside openings containing what must certainly be recognized as somewhat summary representations of the 'sacral horns', a feature which points to the sanctuary character of the building.

The male figure here seen rising above the battlements[1] shows the same bristling hair as the native combatants on the companion piece. Amongst those above the battlements on the larger fragment, the figure gesticulating on the left seems to be of the same shock-headed type. But the woman on the right of this and, apparently, another higher up, is distinctly Minoan in her attire, while the indications of the dress preserved suggest the usual short-sleeved jackets, low cut in front. She is derisively displaying her charms to the assailants, while others repeat a similar mocking gesture, accompanied by cries, as is shown in two cases by the open mouth. On the other hand the woman to the right of the lower group, with her head turned in that direction, seems to be shouting and beckoning to the relief party arriving from the sea.

Non-Minoan element, however, among inhabitants.

It is interesting to observe, however, that, while both in the case of the 'Town Mosaic' and of the scene on the silver 'rhyton', the buildings themselves represent Minoan architectural forms, and we have evidence of armed Minoan defenders in the latter case, there is also an element of an exotic kind. In the 'Town Mosaic' we find it in the Negroid figures, though what part they may have played in the composition remains uncertain. On the 'rhyton' the naked slingers and bowmen[2] seen beneath the walls, though certainly fighting on behalf of the besieged, clearly belong to some extraneous race, since they are not even girt with the Minoan belt. This does not necessarily imply, however, that they were in a state of mere savagery, since, as we know, the most doughty warriors among the Ancient Gauls fought almost naked.

Besides these slingers and bowmen there appear, immediately below the gate of the stronghold, two combatants of a less well defined class, holding each a spear, which is in each case indicated by an incised line, like the fallen stones and throw-sticks of the barbarian foes.[3] The shields them-

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[1] The lower figure in the smaller fragment with bent head and arm is more difficult to interpret. The sex itself is uncertain.

[2] To the left in the same line as the bowmen are seen the head with bristly hair and upper part of the body, also nude, of another man, of whom, however, no traces appear below. Dr. K. Müller regards this as the half-prostrate figure of a wounded man. Dr. F. Noack (*Der schöne Mensch*, 2nd ed., p. 61) suggests that the rest of the figure is supposed to be hidden behind the profile of the hill.

[3] They are not, as suggested in Tsountas and Manatt (*Mycenaean Age*, p. 214), 'mere scratches on the surface'. The shields there are interpreted as 'short cloaks', and the men

Shields of a Minoan type.

selves—of which a strap is seen over the left shoulder of the figure to the right—approach a known Minoan type of oblong semi-cylindrical form, showing a projection on its upper border[1] (see Fig. 53). This type generally appears in profile, as it is borne by the lancer in the scene of combat on a gold signet-ring from the Fourth Shaft Grave at Mycenae, but on the inlaid dagger-blade depicting the lion-hunt its whole outline is visible.[2] It seems to have had a considerable vogue in Crete, since helmeted spearmen with shields of this shape occur on more than one lentoid bead-seal, of inferior and probably Late Minoan work, found in the Island.[3]

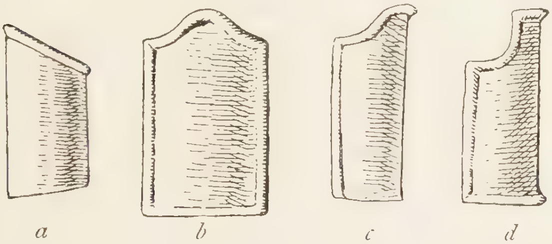

Fig. 53. Semi-cylindrical Minoan Shield Types. *a*, Siege Scene on 'Rhyton'; *b*, Inlaid Dagger-blade (facing); *c*, on Lentoid Bead-seal, Crete; *d*, on Lentoid Bead-seal, Siteia, Crete.

'Shock-haired' barbarians within the walls.

It is, however, to be observed that while—except in the case of the lion-hunt on the dagger—the spearmen who bear these semi-cylindrical shields wear helmets of Minoan shape, the two combatants here seen beneath the gate are distinguished by bare heads with bristling hair identical in appearance with that of the bowmen and slingers. A man, of whom the bare upper part of the body is visible above the topmost parapet on the fragment shown to the right, has bristling locks of the same kind. The enlarged photographic copy of this given in Fig. 51[4] is interesting as showing the original profile, incised by the artist but not followed. The locks of hair here are, indeed, so upstanding as to have suggested an identification with the feather crests of certain heads on the Phaestos Disk, and in turn with the feathered head-pieces of the later Philistine invaders of the Delta on the Pylon of Medinet Habu.[5]

Taken in connexion with these representations as a whole, this sugges-

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thus compared with the elders outside the gates of the besieged city, as in Hesiod's description of the shield of Herakles (lines 245, 246). But the right-hand *telamôn* of the shield borne by the figure to the right is, in fact, quite clearly shown.

[1] See on this class of shield Reichel, *Über Homerische Waffen* (ed. 1894), p. 8. Reichel rightly recognized the shields on the 'rhyton' as variants of this form.

[2] See below, p. 121, Fig. 71.

[3] One of these (cited by Reichel, *loc. cit.*) is in the British Museum (*Cat. Engraved Gems*, No. 77, and cf. A. S. Murray, *Revue Archéol.*, 1878, Pl. 20. 5). Another specimen, also of cornelian, much resembling this, was noted by me in Siteia in 1896. A similar intaglio also found in Crete was in Mr. Seager's possession.

[4] Repeated from Vol. i, p. 668, inset.

[5] H. R. Hall, *A Note on the Phaestos Disk* (*J. H. S.*, xxxi, 1911, p. 119 seqq.). In my observations on the Disk (*P. of M.*, i, p. 668) I was inclined to accept this suggestion.

tion cannot be maintained, but the appearance of the similar figure on the wall-top must be taken to imply that the racial element to which these shock-haired warriors belonged was also included in the population of the besieged town.

Friendly native allies, some arriving by sea.

It looks, however, as if some of the native defending force were arriving by sea. Three of the archers belonging to their ranks are seen, in fact, with one foot beyond the curving line that marks the shore, which leaves us to suppose that they are in the act of disembarking through the shallow water. The native mariners, moreover, seem in part to have been frustrated by a storm at sea—an episode illustrated on the lower zone of the 'rhyton'. There here appear swimmers making their way over the shallow sea towards the land (Fig. 54), pursued, it would seem, by the same dog-headed monster—the Minoan Skylla—whom we see attacking a skiff on a seal-impression from the Temple Repositories at Knossos.[1] Its head appears to the left of Fig. 54.

Ship-wreck and sea monster.

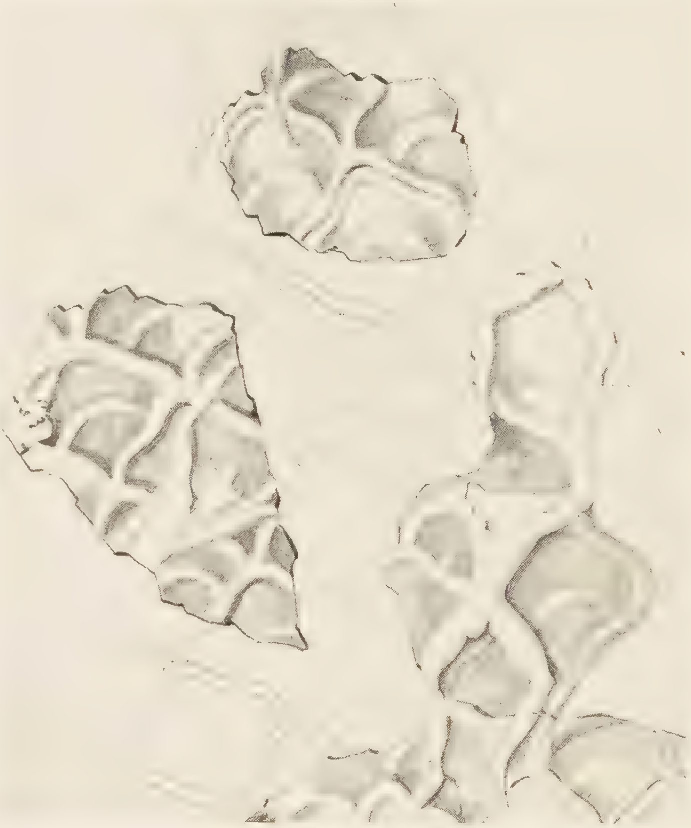

Fig. 54. Swimmers pursued by Dog-headed Monster. (Scale-work representing Shallow Sea.)

These friendly natives who come to the assistance of the besieged, and who are thus represented as already arrayed on the slope beneath the walls or in the very act of landing, shout their defiant cries with open mouths. None of the attacking figures immediately in front of them have been preserved, but their primitive missiles lie about or hurtle through the air in the shape of stones and throw-sticks. Some naked figures, however, apparently belonging to the stone-throwers may be discerned on the fragment, Fig. 55 (see, too, Fig. 56). Two of these seem to be engaged in picking up stones. The lower part of a prostrate figure seen on the field above may be reckoned among the dead or wounded and part of another with an upraised arm turned left may be beckoning to those behind.[1]

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[1] K. Müller (*Jahrb. d. Arch. Inst.*, xxx, p. 322) speaks of these figures as men 'climbing upwards'. But their frog-like attitude is characteristic of swimmers, and the network pattern, as already noted, stands for the shallow sea as well as rocks. For Minoan swimmers an interesting illustration has been supplied by the inlays on the Vapheio dagger-blade described below (see pp. 127, 128 and Fig. 81).

Hostile natives with primitive weapons. Stones.

Fig. 55. Stone-throwers collecting Missiles: E. Gilliéron, fils. ($\frac{2}{1}$)

Throwing-sticks.

The rounded or partly angular objects scattered among the defenders may be taken to represent the stones thus hurled. In others of more elongated shape we may certainly recognize throw-sticks of a form much resembling the Australian *tombat*.[2] These are seen mostly on the sea border, as if they had been specially directed against the relieving force.

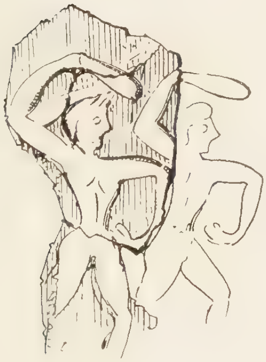

Fig. 56. Fragment showing Naked Barbarians armed with Clubs: E. Gilliéron, fils. ($\frac{2}{1}$)

Clubs.

Another small fragment, of which a drawing, slightly completed by Monsieur Gilliéron, is reproduced in Fig. 56, shows parts of two men armed with clubs which, as they are facing to the right, must probably also be reckoned among the enemy's forces. Like the other barbarians they seem to have been wholly nude.

The combatants on the spot then divide them-

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[1] Reichel's interpretation of this figure as a stone-thrower is impossible since the head is turned to the left. But I am in agreement with his explanation of the stooping figures.

[2] See my remarks in *J. H. S.*, xiii, p. 199, n. 11*a*, and *Scripta Minoa*, i, p. 2, n. 4. Since these missiles lie about they could not have been boomerangs, returning to the thrower's hand. The throw-stick used by Egyptian duck-hunters resembled an elongated Ƨ. Reichel (*op. cit.*, p. 142) had suggested that these and the smaller figures might be signs of an unknown script. Sp. Marinatos puts forward the curious view that the objects are 'foundered ships' βυθιζόμε πλοῖα—with high prows (Ἀρχ. Δελτ., 1926, p. 81).

Native friendlies better armed.

selves into two parties of friendly and hostile natives. The latter of these, as is shown by their weapons, throwing-sticks and stones and wooden clubs, clearly belonged to a lower stage of culture. The others, though they mostly fight bare-limbed, possess more artificial arms such as slings and bows, which, as is best evidenced by the third from the right, are of the Asiatic horn type. Two of them, moreover, not only bear shields of a Minoan class, but hold spears that may be presumed to have had heads of bronze.

Minoan element among defenders: warriors in boat.

A third element, apparently purely Minoan,—like the jacketed ladies on the parapets of the citadel—finds an imperfect record on the lower borders of the larger piece depicting the siege scene. That a war-galley was there approaching the shore is shown by the appearance of three peaked helmets and the upper figure of the steersman who grasps the end of the steering-oar behind. He is wearing a short-sleeved tunic—a garment of which examples are known from Crete as well as Mainland Greece,—and the crest flowing behind his peaked helmet gives the idea of the rapid forward motion of the boat. The crested helmet itself, in that case without an earpiece, recalls those of warriors on Knossian seal-impressions, and the triple horizontal divisions visible on all repeat the usual type adorned with rows of boar's tushes.[1]

There is a strong presumption that we have here Minoan warriors, dispatched for the relief of some threatened outpost of Cretan dominions overseas, and who have arrived in time to reinforce the hasty levies of friendly natives,[2] either belonging to the town itself or to neighbouring parts of the coast. Equally with these allies they are the butt of barbarian missiles.

The relief a historic record.

The subject of the whole design is thus the relief and delivery of some Minoan outpost outside Crete, hard pressed by a barbarian onslaught from the land side. As already observed, it is a real record, and whether we place the moving scenes that it commemorates on the European or the Anatolian side, brings into strong relief the superiority of the Minoan civilization at the beginning of the 'New Era'—whether in Crete itself or n some part of the Mainland coast tract, East or West, that may already have been assimilated to it by successful conquest—over that of the native races that occupied the coasts and hinterlands of the Aegean basin.

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[1] The best known examples of this type are from Mycenae, 'Εφ. 'Αρχ., 1888, Pl. VIII, 12, but there seems no warrant for the conclusion that they are a special Mainland feature advanced by Prof. Martin Nilsson (*Min. Myc. Religion*, pp. 19, 20). Traces of the rows of boar's tushes, somewhat summarily indicated, are visible on Cretan representations, and boar's tusks occur in the Minoan tombs of Crete.

[2] I can see no grounds for K. Müller's view (*Jahrb. d. Arch. Inst.*, xxx, p. 321) that they are hurrying to surprise the defenders of the besieged stronghold in flank. They are rowing counter to the direction from which the barbaric enemies attack and, like the 'friendlies', are exposed to his missiles. Reichel's suggestion (*op. cit.*) that they are 'pirates' whom the defenders are trying to beat back is equally irreconcilable with the elements preserved to us.

Topographical data.

As to the local geographical conditions we have some hints. It looks as if the stronghold on the height, round which the story centres, stood at the end of some sea inlet, shut in on one side by a headland of which the obtuse end can be traced in the lower section of the funnel, bordered by the reticulated convention of rocks. On this promontory trees are visible which may be probably identified with some kind of pine, while, in the immediate neighbourhood of the town itself, are others in which, by the light of similar Minoan representations, we may recognize olive-trees—an evidence of the advance of civilized culture.

Presumptions in favour of Anatolian Coast.

But if these events took place on the Aegean coastlands, and we can hardly go farther afield, on which of them was this scene enacted? The topographical conditions, illustrated by the rock-girt inlet of sea, might answer, indeed, to those of the Eastern littoral of the Morea, but are we justified in supposing that at the epoch to which the 'rhyton' belongs—the latter half probably of the sixteenth century before our era, when the Minoan settlement at Mycenae was already some generations old—there could have been such an abrupt contrast between the native culture and that of the ruling race?

Our knowledge of the indigenous background in a large part of the overseas regions is still very insufficient in most directions, but such evidence as we can control regarding the equipment of these native elements, seems to point rather to the Anatolian side.

Slings typical Asianic weapons.

The use of the sling, though said to have been introduced into Greece by the Aetolians, is more characteristic of the peoples of Hither Asia, as it was of the Phoenicians and Assyrians. What seem to have been sling-bullets of haematite and other stones occurred abundantly at Hissarlik,[1] and at a later date slingers appear on the coins of Aspendus[2] and Selgê[3] as representing a typical Pamphylian and Pisidian arm.

Clubs also traditional.

The club is essentially a barbaric weapon, and, though of wide primitive usage on the European side, has a special tendency to survive in a religious connexion in the old

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[1] Schliemann, *Ilios* (Engl. ed.), pp. 436, 438, and Figs. 609–19.

[2] *B.M. Cat. Greek Coins of Lycia, Pamphylia, and Pisidia*, Pl. XIX, Figs. 12–15, and Plates XX, XXI. Cf. Dr. G. F. Hill's remarks, p. lxxii. The repetition of the 'slinger' type must be taken to represent a local usage as well as a play on the name.

[3] *Ibid.*, Pl. XXXIX, 10–13. The name of Selgê in variant forms shows the same equivalence with the Greek *στλεγγίς* (sling). The inscriptions ΣΤΛΕΓΙΥΣ, ΣΤΛΕΓΙΟΝ are found. See Inhoof-Blumer, *Zeitschr. f. Numismatik*, v, p. 132 seqq.

Carian regions. It occurs on the Phaestos Disk [1]—*ex hypothesi* of a sacral character and of a S.W. Anatolian provenance—while on coins of Comana we see it in the hands of Ma, the great Asianic Goddess.

So far as can be gathered from the somewhat sketchy *graffiti* on the vase, the throw-sticks bore a greater resemblance to modern hockey sticks than to the mere crook traditionally used by shepherds in Classical times to fling at hares—the *pedum* or λαγωβόλον attributed to Pan.

The use by the 'friendlies' here of bows of the 'composite' or horned Asiatic type is not itself conclusive since, though the primitive European bow was of the 'plain' kind, the other form already appears in Late Minoan hands,[2] and may have thence passed into native usage.

Archers paralleled by Knossian small relief.

The figures of the archers kneeling on one knee, coupled with the reticulated ornament, standing for rocks, below, afford a close parallel to a relief on a fragment of a steatite vessel found to the North-East of the Palace site at Knossos (Fig. 59, p. 106).[3] Here the archer, however, whose forward knee is bent, seems to be mounting a conventional rocky steep, while the lower part of the other leg extends below a horizontal bar that may well be the border of a boat. He would, in this case, be in the act of landing—another parallel with the bowmen on the silver 'rhyton', who, as noted above, seem to be in the act of disembarking with one foot in the shallow water.

The archer on the Knossian fragment is clad with the Minoan belt and 'shorts', like those of the lion-hunters on the Mycenae dagger-blade,[4] and apparently wears a helmet with cheek-pieces. He has, moreover, the exceptional appearance of having a pointed beard.

Attention has been already called to the conformity of the structures on the smaller piece of the silver 'rhyton', showing superposed columns and sacral horns in the intervals, with the similar stepping structures on another small steatite relief from Knossos, probably belonging to the same kind of vessel.

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[1] On the coins of the Carian island of Kos, as well as of Selgê in Pisidia, the club rather than the bow is the symbol of the native Herakles. It may also be said, generally, that Herakles derived his club from the same quarter as the Asiatic horn bow.

[2] See *P. of M.*, ii, Pt. I, p. 50, n. 2.

[3] In *Knossos, Report*, 1900, p. 44, this figure was set askew. The scale pattern, as Dr. K. Müller rightly pointed out (*Früh-mykenische Reliefs*, *Jahrb.* xxx, p. 262), should be placed, as here, at right angles to its vertical axis.

[4] See p. 121, Fig. 71, below. Similar 'shorts' or 'bathing drawers' appear on two Zakro sealings of the earlier 'fantastic' class (M. M. III). See *J. H. S.*, xxii, p. 80, Fig. 12, and Pl. VII, 34, 36. They recur on a signet-ring of good style worn by a fallen cow-boy in a scene of the *Taurokathapsia* (A. E., *Ring of Nestor*, &c., p. 6, Fig. 4 : *J. H. S.*, 1925).

Pictorial style parallel with Miniature Fresco.

On the other hand it is natural to suppose that these small reliefs on the vessels, whether in metal-work or soft stone, were largely based on the fuller compositions supplied by the set of Miniature wall-paintings. The fragments described above show that, besides scenes connected with sports and sacred dances, the theme of the beleaguered stronghold also found illustration in works of this class at Knossos, as it had in the faïence mosaic of a somewhat earlier date. The same dramatic spirit breathes in both the frescoes and reliefs, and the gesticulating women on the wall-tops as seen on the 'rhyton'—these too in fashionable attire—find a distinct analogy, though more restrained in tone as befitting the different situation, in the conversational groups of Palace ladies who occupy the front seats in the shows.

Anticipations of scenes on shields of Achilles and Herakles.

From the first an analogy has been drawn between the gesticulating women on the walls and parapets of the stronghold as seen on the silver 'rhyton' and similar episodes on the shields of Achilles and Herakles as described by Homer and Hesiod.[1] With regard to the first example, indeed, it may be remarked that the wives and infant children who, with the old men, stood as guards upon the walls,[2] must rather in the first instance have been placed there to convey to approaching enemies the idea that the walls were manned, though the other object of rousing desperate valour in husbands and sons may also have been kept in view. The latter object seems at any rate to have been mainly aimed at by the women, shrieking and tearing their cheeks, on the mighty towers, as imaged by Hephaestos on the shield of Herakles.[3] The mainspring of their action here was terror, and we are expressly told that the old men—in this case stationed outside the gate—were 'stricken with fear'.[4]

Besieged stronghold traditional in Egyptian art.

The theme of the stronghold, either besieged or taken, finds its forerunners in the proto-dynastic stage of Egyptian art among the reliefs of the characteristic slate palettes. The enceinte itself is there shown in plan, with towers at intervals, square or rounded. On the tablet of Nar-mer, the Conqueror, figured as a bull, batters the walls—the vanquished chief, girt with the Libyan sheath, lying prostrate below [1]—in another case the captured City is symbolized by a lion and vase within its circuit.[2] Under the Early Dynasties this method of drawing the surrounding walls in plan is adapted to a more dramatic presentation of the incidents of the operations. In the tomb of Anta, dating from about the middle of the Fifth Dynasty—*c.* 2680–2540 B.C.—a plan is thus given of a beleaguered stronghold somewhere in the Semitic borderlands of Egypt, though a scaling ladder—an incongruous feature as here introduced—is at the same time set against it (Fig. 57). The oblong walled enclosure is divided into successive zones depicting a series of scenes, in the first of which women and children are seen gaining an easy victory over some Bedouin allies of the Egyptians who have succeeded in scaling the walls, but cannot find room to use their bows.[3] The women and even the children—alone left to man the walls—have thus a chance of resistance. In the first row a woman stabs a Bedouin archer to the left, while a second to the right breaks his bow in token of surrender to a mere child armed with a dagger, who is put forward for the purpose by his mother, standing behind him. Similar scenes are represented in the other rows, but, while the artist thus complacently records the discomfiture of the desert allies and the failure of the escalade, an old man in the lowest compartment hears the Egyptian sappers breaking through the wall. In the second row an aged man leaning on his staff, with his hand on the head of his infant son, and two women, one bowed forward and holding her hand to her forehead, the other, perhaps the Queen, prostrated and holding out a lotus flower, appear before the seated figure of the King—the Priam of a more ancient Ilion—to announce to him the impending doom.[4]

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[1] Cf. Tsountas, 'Εφ. 'Αρχ., 1891, p. 20; Tsountas and Manatt, *Mycenaean Age*, p. 214, &c.

[2] *Il.* xviii. 514, 515:

τεῖχος μὲν ῥ' ἄλοχοί τε φίλαι καὶ νήπια τέκνα
ῥύατ' ἐφεσταότες, μετὰ δ' ἀνέρες, οὓς ἔχε
γῆρας·

[3] Hesiod, *'Ασπίς*, 242 seqq.:

αἱ δὲ γυναῖκες ἐϋδμήτων ἐπὶ πύργων
χαλκέων, ὀξὺ βόων, κατὰ δ' ἐδρύπτοντο παρειάς
ζωῇσιν ἴκελαι, ἔργα κλυτοῦ Ἡφαίστοιο.

[4] *Ibid.*, v. 245–8:

ἄνδρες δ', οἳ πρεσβῆες ἔσαν γῆράς τε μεμάρπον,
ἀθρόοι ἔκτοσθεν πυλέων ἔσαν, ἂν δὲ θεοῖσι
χεῖρας ἔχον μακάρεσσι, περὶ σφετέροισι τέκεσσι
δειδιότες.

Example from Fifth Dynasty Tomb of Anta.

Its dramatic character.

Middle Empire examples.

In the period of the Middle Empire the besieged strongholds are shown in elevation, but this advance in artistic method is accompanied by a distinct falling off in dramatic presentment. In the siege scenes, for instance, from the tombs of the Twelfth Dynasty Cemetery at Beni Hassan,[5] warriors

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[1] J. E. Quibell, *Hierakonpolis*, Pl. XXIX, and *Zeitschrift für A. S.*, 1898, Plates XII, XIII.

[2] In a fragment of a tablet in the Louvre, first published by Heuzey, *Bull. de Corr. Hell.*, xvi, Pl. I, p. 307 seqq.

[3] Petrie, *Deshasheh*, Pl. IV, and pp. 5, 6. Petrie describes the scene as representing 'a war between the Egyptians and a people of North Arabia or Southern Palestine'. He calls the allies of the Egyptians 'Bedawi', while the defenders of the tomb are Sati.

[4] In the more or less contemporary Pyramid of Teti we again see a plan of the besieged building attacked by a scaling party, including a ladder on rollers. J. E. Quibell and A. G. K. Hayter, *Excavations at Saqqara* (Pyramid of Teti, North side), Frontispiece.

[5] P. E. Newberry, *Beni Hassan*, Pt. I, Pl. XIV; Tomb of Amenemhat, Pt. II, Pl. V; Tomb (15) of Baqt III, Pt. II, Pl. XV; Tomb (17) of Khety.

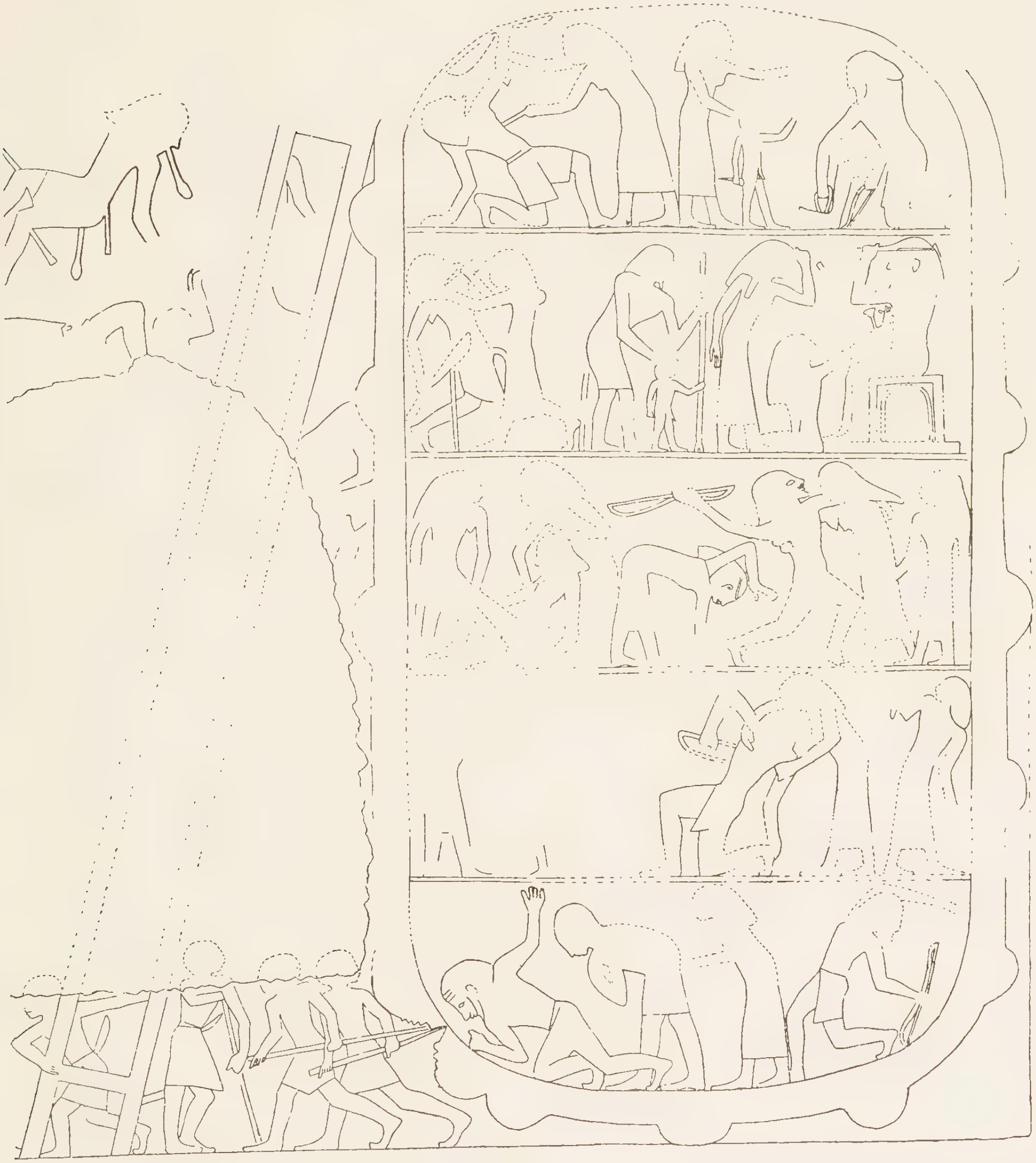

Fig. 57. Egyptian Siege Scene from Tomb of Anta (Vth Dynasty).

alone appear on the wall-tops and battlements. About the beginning of the Nineteenth Dynasty, however, as in the relief recording the capture of Kadesh by Sety I[1]—shortly after 1320 B.C.—a more varied and lively version makes its appearance, and a further dramatization is visible in

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[1] In the great hypostyle Hall of Karnak (Lepsius, *Denkmäler*, iii, &c.).

Sensational versions of New Empire: Siege of Tabor.

sculptures of the Ramesseum, such as that (Fig. 58) depicting the siege of Tabor in Rameses II's fifth year (1295 B.C.).[1]

The city itself stands on a rocky height fenced round with a double enceinte, including a citadel tower or keep, and a gate with upright posts is shown to the left of the outer wall. Women in wild gesticulation are there seen on the towers and battlements beside the defenders, armed with bows, spears, and stones, while some of the inhabitants endeavour to escape by means of ropes. The attacking force, among whom are Shardanas with horned helmets, as well as Egyptians armed with round-topped shields, make use of the 'testudo' for their approach, but the ladder for scaling the walls has lost its hold, and is falling, together with two of the aggressors. One of the Shardanas makes use of a spike of metal to climb the rocks.[2] The citadel tower shows a standard transfixed with arrows—the sign of defeat—while a figure holds a flaming censer with an incense offering to the Egyptian king, a visible token of surrender.

Was there a Minoan reaction on Egypt?

Here, too, as on the silver 'rhyton', we find what is clearly a faithful record of various thrilling episodes of the attack—not all favourable to the victor, like the shipwreck in the other case. Here, too, moreover, we see carefully depicted various ethnic characteristics in armature and dress. Egyptians with their national coiffure and sashes, together with their rounded shields, Shardana mercenaries with their two-horned casques, long thrusting swords, and round targes, and the native Syrians with long Semitic gaberdines.

The analogies between this and other Egyptian siege scenes of this later epoch, with those of the Minoan composition, are sufficiently obvious. At the same time the great posteriority in date—amounting in the above case to over two centuries—makes it quite possible to trace in this sensational version the direct reaction of such Minoan models, belonging to the early part of the New Era, on the stiff conventional schemes that the Egyptian sculptors inherited from the Middle Empire.

The spirit that breathes in the Minoan version is far more in keeping

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[1] Lepsius, *Denkmäler*, iii, 166 (some details inaccurate); Rosellini, *Mon. Stor.*, cviii; Wilkinson, *Ancient Egyptians*, i, p. 243 (some omissions); Prisse d'Avennes, *Art Egypt.*, ii, 17, reproduced in Fig. 58; Wreszinski, *Atlas zur altägypt. Kulturgeschichte*, ii, 107–9. Another relief of Rameses II also shows the siege of a Syrian fortress (Rosellini, T. 68; Von Bissing, *Denkmäler ägyptischer Skulptur*, Pl. 93 and text (Medinet Habu). Baron Von Bissing in comparing the Mycenae relief with the Egyptian class of siege scenes agrees that many details of the Minoan example, in the form and position of the stronghold and in the movements of the besiegers and defenders, present analogies with the Egyptian versions.

[2] See Wilkinson, *op. cit.*, p. xxi, No. 75.

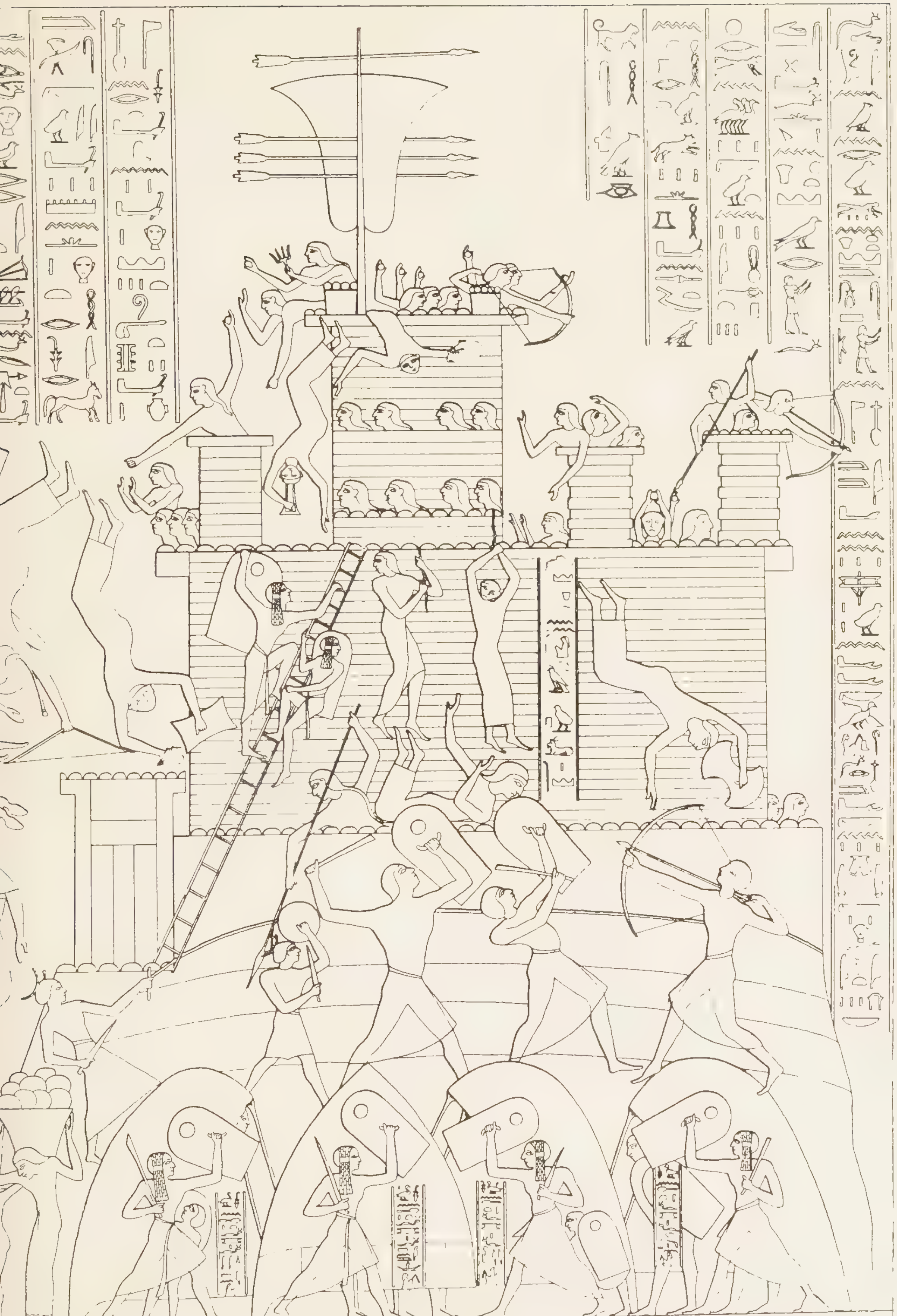

Fig. 58. Siege of Tabor in Fifth Year of Rameses II: 1295 b c. (Ramesseum)

Cretan Miniature Art supplies link between early Egypt and epic tradition.

with the naïve dramatic force visible in the earlier reliefs of the Tomb of Anta. Looked at, indeed, from this point of view, the siege scene on the ‘rhyton’ is but a link in a long chain. In the other direction the anticipation of the imagery of Greek epic is clearly discernible. Once more, indeed, we see Minoan Crete serving as a medium through which, when Classical Greece was still undreamed of, traditional methods of expression taken over from the more ancient civilization of the Nile Valley first reached our Continent. But considered in regard to its particular composition and details, the scene thus recorded in small relief must before all things be regarded as an actual document illustrating some critical episode of Minoan colonial history—a document possibly taken over from a painted record on the walls. The glimpses of parallel scenes, imperfect though they are, supplied by the fragments of frescoes in the Miniature style, were no doubt in the same way based on episodes of actual occurrence.

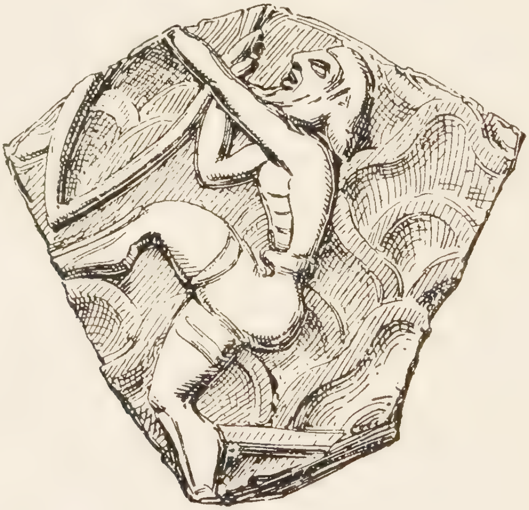

Fig. 59. Fragment of Steatite ‘Rhyton’ from N.E. Angle of Palace Site, Knossos. Archer, apparently disembarking from a Boat (a Horizontal Border of which appears) and mounting Rocks of Conventional, Scale-shaped Outline.

§ 73. MINIATURE PAINTING ON CRYSTAL: 'PAINTING' IN METAL-WORK—ENGRAILED DESIGNS ON THE BLADES OF WEAPONS.

Similar Subjects of Wall-paintings and small reliefs; Other examples of painting on the back of Crystal—lens of bull's eye and pommel of dagger; Painted Crystal plaque from Room of the Throne, presenting bull-catching scene—Microscopic work; Driven bull barred by rope; Locks visible of leaping Cow-boy; Perfection of Miniaturists' Art; 'Painting in Metals'—Minoan intarsia work; M. M. II dagger from Lasithi; The Mycenae daggers—Egyptian adaptations; 'Nile pieces' on dagger-blade—description of technique; Hunting-leopards or Chitas; Egyptian Caffre cats—trained to catch ducks; Indigenous Cretan versions—pheasants for water-fowl; Influence of Nile scenes on Minoan and Mycenaean Ceramic Art; Also frequent on intaglios; Duality of scenes on dagger-blade—other examples; Also division into three, as on Vapheio Cups; Dividing up of designs reflects separate panels of fresco technique; Lion-hunt on Mycenae dagger; Successive stages in execution; Restoration of dagger—duality of designs, again marked; An Epic touch; Original design drawn by eyewitness of lion-hunts; Lions in Classical Greece; Comparison with African scenes of lion-hunting in modern film (Simba)*; Lion bringing down Gazelle; Fragment of painted relief of lion from S.E. Palace Angle; Intaglio types derived from painted reliefs; Type of hero stabbing lion on Mycenae bead-seal; Copied by Third-Century Greek engraver—Canea find; Minoans personally acquainted with lions in every aspect; Lion sacred to Minoan Goddess; Vapheio dagger-blade with inlaid designs of swimmers; Flying-fish on Vapheio blade compared with fresco; Lilies on inlaid blade based on fresco band—M. M. III parallels; Masterpieces of inlaid metal-work recorded in Greek Epic—implied knowledge of Minoan originals; Yet the Art itself extinct long before Achaean invasions.*

Simila subjec of min ture painti and s reliefs

IT has been already noted[1] that the pugilists seen in the Miniature fresco from Tylissos find their counterparts in small reliefs on steatite vases both from Knossos and Phaestos of the same approximate date. The fragmentary remains of bull-grappling scenes in painted stucco are in turn reflected in such miniature representations on vases of soft stone, and these again find their parallels in repoussé metal-work design, as seen, for instance, on the Vapheio Cups. For our fuller knowledge of the siege scenes, of which there exist only imperfect records in frescoes of this class, we have had to turn to the silver 'rhyton' from the Mycenae shaft-grave.

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[1] See above, p. 35.

These parallels do not, naturally, always imply the actual copying of miniature panels of painted plaster on the walls. But the evidence is at least sufficient to show that there was a sympathetic movement of the kind in various branches of contemporary art about the beginning of the New Era.

In the wonderful inlaid designs in metal-work, such as those of the dagger-blades described below, the actual colour effects of the frescoes are successfully imitated. In one particular department of contemporary art, moreover, the miniature style in painting itself attained a microscopic finish such as could not be rivalled on the plaster of the walls.

Bull-catching Scene painted on Crystal Plaque.

Bull-catching scene painted on crystal plaque. Other examples of crystal painting: lens of bull's eye.

This was the art of painting on the back of small crystal plaques or bosses, which was carried at Knossos to a perfection worthy of the greatest miniaturists of later times.

In its general aspect we have seen a good example of this kind of work in the case of the crystal lens of the eye of the magnificent steatite 'rhyton' in the form of a bull's head found in the Little Palace. Here the bossed form had, besides, the effect of magnifying the black iris and the scarlet pupil, rimmed by the white cornea, conveying 'an almost startling impression of fiery life'[1].

Crystal pommel of dagger.

In the same way we see such lentoid disks cunningly inserted to enhance the effect of the crystal inlays above the bright blue smalt on the ivory draught-board. Another decorative example of this art is supplied by a hemispherical crystal—probably the upper part of the pommel of a dagger-hilt—from the Third Shaft Grave at Mycenae[2] which shows pointed arches, red and white within. In later days at least—the Nineteenth Dynasty—this decorative process was known in Egypt, as is shown by the hollowed crystal boss of a pectoral from Gurob, with a miniature painting of the heron-like Bennu bird in black on the underside, which was lined with gold leaf.[3]

That at Knossos this art was already practised by the beginning of the New Era appears from the evidence—unfortunately evanescent—of a crystal plaque described below, which must have belonged to some large inlaid composition like the earlier 'Town Mosaic' executed in native faïence.

But the most remarkable illustration was supplied by what remains of another crystal plaque—no doubt also belonging to a larger connected scene

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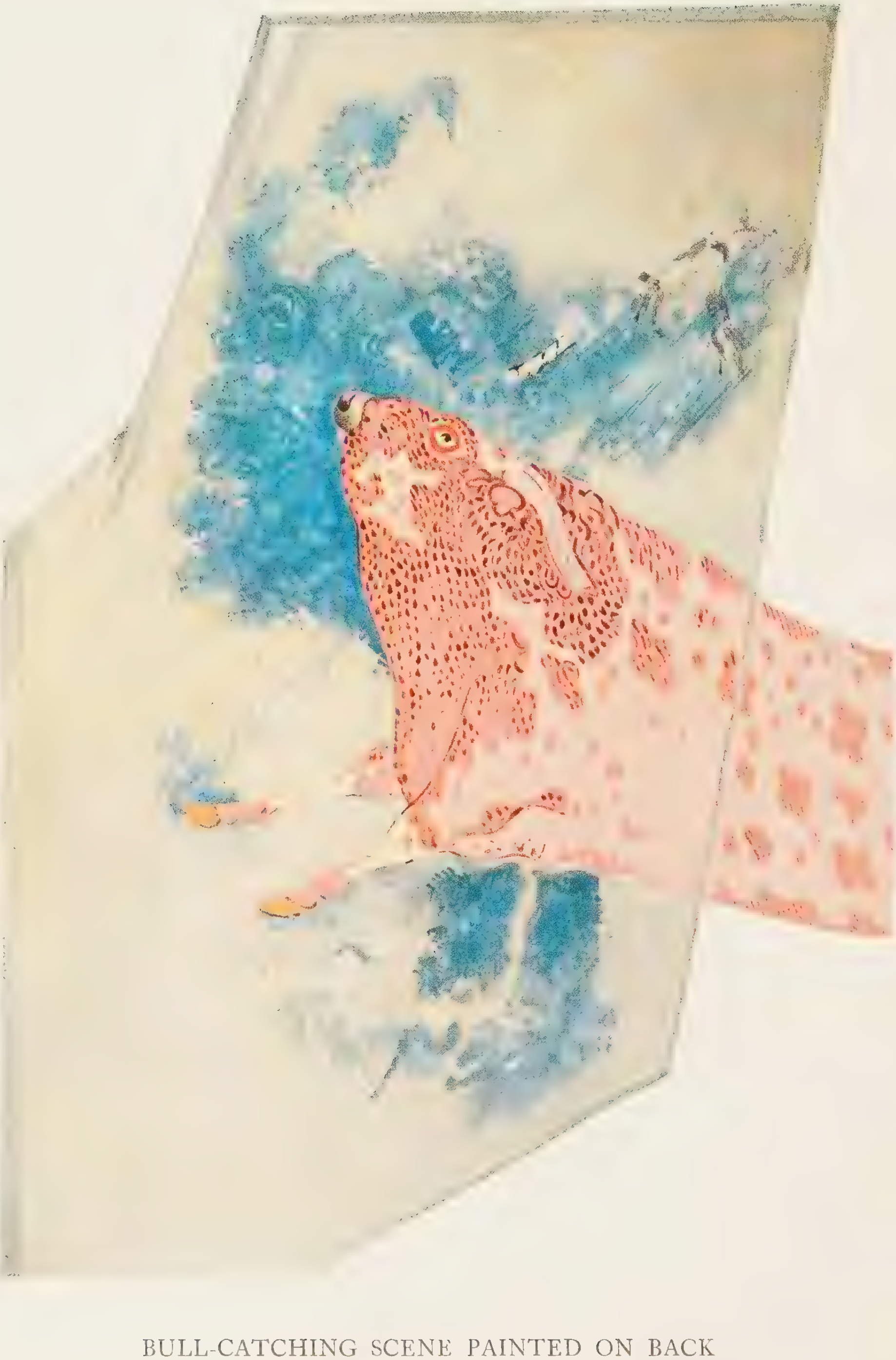
[1] See *P. of M.*, ii, Pt. II, p. 530.

[2] Schliemann, *Mycenae*, p. 200, Fig. 308. Schuchardt, *Schliemann's Excavs.*, pp. 194, 195, suggested that it was a hair-pin.

[3] Petrie, *Kahun, Gurob and Hawara*, p. 35 and Pl. XXIV, 3.



BULL-CATCHING SCENE PAINTED ON BACK OF CRYSTAL PLAQUE (Enlarged 3 diam.)

Painted crystal plaque from Room o Throne

—that came to light with other crystal relics in the lustral area of the Room of the Throne. The precious object of which it formed part may well have belonged to the Treasure of the last of the Priest-Kings to use the neighbouring throne. That it was an heirloom of somewhat earlier date is, however, probable enough, and in any case, as representing the acme of this Minoan class of miniature painting on crystal, its description may be most fittingly placed here.

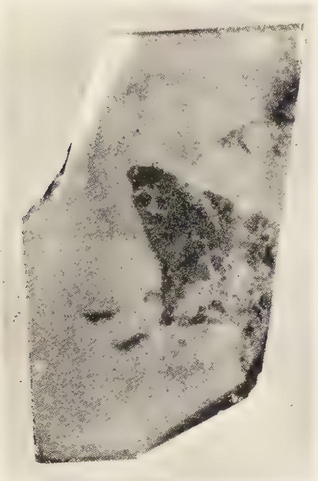


Fig. 60. Part of Miniature Bull-hunting Scene painted on Back of Crystal Plaque. ($\frac{1}{1}$)

The height of the plaque (Fig. 60)—part of the upper edges of which are preserved as well as the lower left-hand corner—is 55 millimetres and the extreme width of the fragment 35 mm. Upon the back of it, overlaid on a fine layer of brilliant blue smalt or 'kyanos', which reappears as the sky beyond, is seen the forepart of a bull at full gallop, its head thrown up and so twisted that one horn is brought down rather low on the side of the neck. The forelegs, as usual in such representations, are rather short and thin as compared with the huge body.

Microscopic work.

The extraordinarily minute character of the work may be best gathered from the enlargement to three diameters in the Coloured Plate XIX reproduced from a drawing executed for me by Monsieur E. Gilliéron, fils, together with the completed design Fig. 61. The eye with its white cornea and red rim, the rough surface of the horn which presses down the ear, the typical quatrefoil spots, even the individual hairs are exquisitely rendered.

Driven bull barred rope.

In the field above the bull's head are the two determining features of the episode here depicted, a section of twisted rope descending obliquely, and to the right of it long falling locks of a leaping human figure, which itself has disappeared.

Locks visible of leapi cow-bo

No traces remain on the crystal of the rope in its further course, it having been entirely covered by the intrusion of the thicker layer of powdered smalt. Beyond the front of the beast's head it has been obliterated in the same way. Had it traversed the head itself its traces would have been visible. It seems to have been taut and to have run on in the same direction, immediately in front, so that the bull's mighty mass would inevitably have been hurled against it.

It is clear that we have not here to do with an ordinary scene of lassoing an animal, such as is undoubtedly depicted on a lentoid intaglio from Crete already figured,[1] where a hunter has flung his lasso round the neck of a huge horned sheep, engaged in suckling her young. From the section preserved we may gather that the rope was in this case tightly stretched, doubtless, between two tree trunks to which it had been attached. The beast was then driven down some woodland ride or glen, a cow-boy being

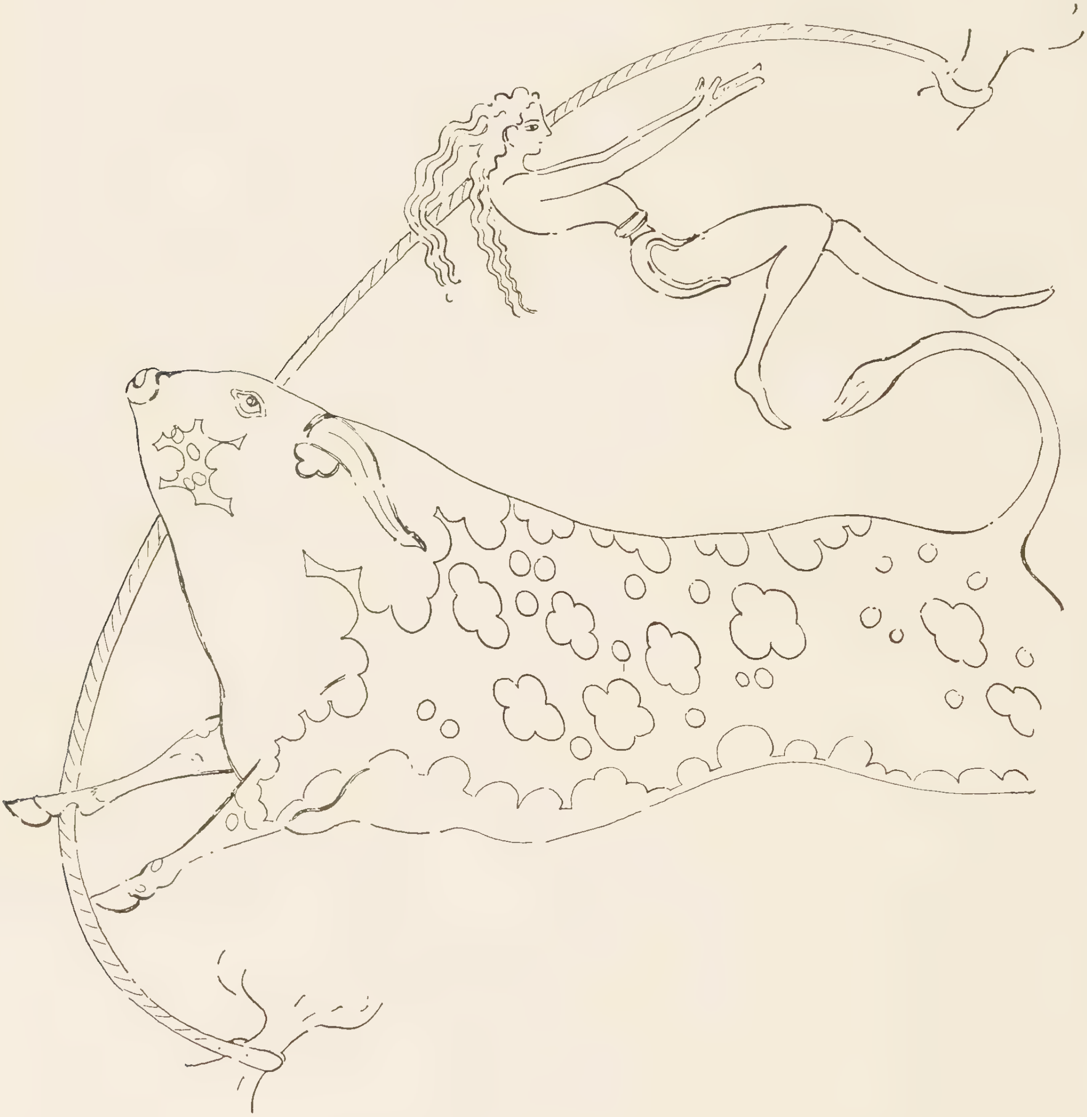


FIG. 61. ENLARGED COMPLETION OF MINIATURE DESIGN OF BULL-HUNTING SCENE ON BACK OF CRYSTAL PLAQUE. ($\frac{3}{1}$)

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[1] *P. of M.*, i, pp. 684, 685, Fig. 503.

posted so as to be able to leap down at the moment when his headlong course was checked by the rope, to seize his horns and complete his overthrow. In the cross-rope itself we have thus a simpler version of the rope cradle in which the whole animal is caught in the sensational scene on the Vapheio Cup.[1]

The long locks of the Minoan cow-boy falling across the line of the rope show in fact that he (or she) was in the act of springing forward, and compare with those, for instance, of the female taureador from the Domestic Quarter illustrated below. Monsieur Gilliéron, in accordance with this suggestion, has executed the restored sketch of the whole scene reproduced in Fig. 61.

Perfection of Miniaturist's Art.

This marvellously microscopic work, the details of which are hardly discernible to the ordinary eye except when considerably enlarged as in Plate XIX, represents the *ne plus ultra* of the Minoan miniaturist's art. It may indeed well be asked whether a crystal lens, such as the bosses actually used for inlays, may not have served for its production.[2] Delicate as is the delineation of the diminutive heads on the painted stucco panels, the fresco process itself and the amount of 'shorthand' required in these large compositions excluded the elaborate perfection of the minutest features that we find in this case. Here the artist was free to complete his work at his leisure, unhurried by the time-limits of the fresco technique. The 'back-work' on the crystal, moreover, secured the luminous effect in the colouring that gives to-day an added charm to paintings exhibited under glass.

'Painting in Metals': the Engrailed Designs on the Blades of Weapons.

'Painting in metals': Minoan intarsia work.

Apart from such painting on the back of crystal plaques, which represent in fact a parallel development of the limner's art, the nearest comparison with the miniature paintings on the walls is supplied by the scenes depicted in inlaid metal-work of varied hues. This specially Minoan art of engrailing has indeed been well described as 'painting in metals'.[3]

M. M. II dagger from Lasithi.

Its rudimentary stage may be already illustrated in the M. M. II dagger-blade from the Lasithi district with incised designs, the inlaying material of which has, however, been lost, depicting on one side a fight between two bulls and on the other a boar-hunting scene (Fig. 62).[4] The latter was no doubt an old traditional sport in the Island but we can trace, nevertheless, in this somewhat naïve, if vigorous, design of the hunter, with flowing waist-band thrusting his spear into the boar's forehead, a forerunner of that on the Mycenae dagger-blade described below, in which fully armed Minoan warriors wage actual war upon a troop of lions.

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[1] See below, p. 179, Fig. 123, A.

[2] One from the Mavro Spelio Cemetery, near Knossos, has a magnifying power of 10 diams. (See Forsdyke, *B.S.A.*, xxviii, p. 288; VI A, 13.)

[3] Prof. G. Karo happily refers to it as 'Metallmalerei'.

[4] *P. of M.*, i, pp. 718–20, and Fig. 541, *a*, *b*.

In this art of inlaid work, as brought to perfection on Cretan soil, the marvellous dagger-blades from the Mycenae Shaft Graves have long supplied brilliant examples, and the Minoan craftsmen were here the masters of the Egyptian. The indebtedness in detail shown by parallel works from Egypt has been already illustrated in the case of the inlaid dagger-blade and axe-head from the tomb of Queen Aah-hotep with the name of King Aahmes, the first king of the Eighteenth Dynasty (*c.* 1587 B. C.). On the first of these appears a lion-hunt with the animals at full gallop and rocks descending from the upper border, both purely Minoan features. On the second is seated a griffin with coiled Minoan locks and wings presenting the M. M. III 'notched plume' motive in its secondary stage.[1]

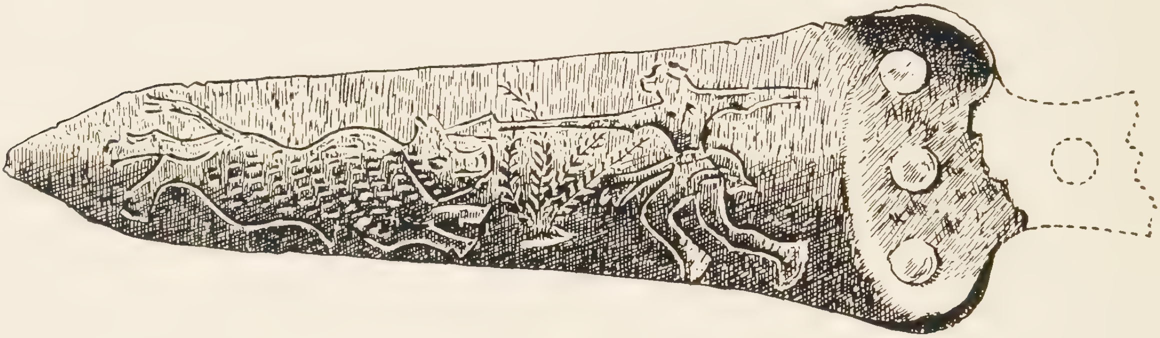

FIG. 62. EARLY BRONZE DAGGER-BLADE (M. M. II) FROM PSYCHRO WITH ENGRAVED DESIGN FOR INLAY.

The Mycenae daggers.

Egyptian adaptations.

It will be seen from the first example that engrailed designs like that on the dagger-blade depicting the lion-hunt from the Fourth Shaft Grave at Mycenae[2] were already reacting on Egyptian art by the very beginning of the Eighteenth Dynasty—by the end, that is, of the first quarter of the sixteenth century B. C.

But in the Minoan works—far beyond the inlaid designs executed on the royal arms of the Pharaohs—even the nuances of hue inherent in the painter's art were actually reproduced.

Thanks to the remarkable drawings executed for me by Monsieur E. Gilliéron, fils, it is possible in this place to illustrate two of these inlaid daggers, together with sections and illustrations of successive stages of their fabric of a kind not yet attempted. He has also with great liberality placed at my disposal his technical observations as to these objects due to close and repeated personal observation and aided by chemical experts.

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[1] *P. of M.*, i, pp. 715, 716, and Fig. 537.

[2] *Ibid.*, p. 547 seqq., and p. 551, Fig. 402.

'Nile Pieces' on Dagger-blade.

'Nile pieces' on dagger-blade.

One of the most splendid illustrations of the processes employed is the dagger depicting the 'Nile piece' (Coloured Plate XX and Figs. 63, 64), the connexion of which with a class of painted stucco designs on the walls of the Cretan Palaces is clearly ascertained.

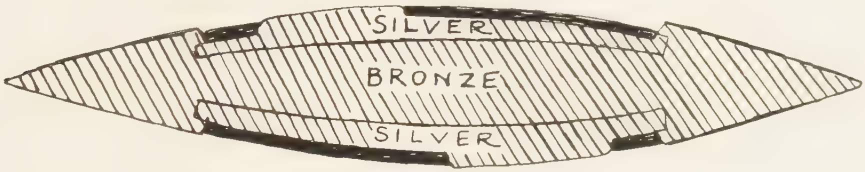

Fig. 63. Section of Dagger-blade with Inlays showing River and Duck-hunting Scenes.

Fig. 64. Central Part of Dagger, showing the Outlines and Raised Surfaces of the Silver Plate socketed into the Bronze Blade. ($\frac{1}{1}$)

Description of technique.

In this case, as is shown in the Section (Fig. 63), a cavity, about a millimetre in depth, has been hollowed out of the central part of the bronze blade, and into this has been set a silver plate following its curve below the general level of the dagger-blade, so as to leave a sunken space to be filled with niello. In part of its width, however, this inserted plate rises to the surface, forming on both faces of the dagger a wavy silver band that extends to the whole length of the blade and forms the river-course in the design, its surface being oxidized to give relief to the fishes. In two other places, moreover, this silver plate reaches the surface, partly inlaid with gold, in the form of a hunting animal of cat-like aspect.

Besides the black niello, the cut-out surface of this central plate forms the basis for incrustations of pale gold, polished silver, and more rarely of copper,[1] which fill in the outlines of the hunting-leopards, water-fowl, fish, and papyrus clumps that make up these spirited designs and the details of which are marked by niello lines and dots.

Hunting-leopards or Chitas.

The animals represented belong to two distinct species. In one of these we may recognize the hunting-leopard, the yellow skin being rendered in each case by a thin gold plate, overlaid on the silver. The spots are indicated by dots and dashes, and the rings on the somewhat bushy tail are clearly featured. As the range of the hunting-leopard or Chita extends over a large part of Africa and through Syria, Mesopotamia, and Persia to the Ganges there is no difficulty in this attribution. It is possible, moreover, though its chief prey is antelopes and gazelles, that it was also trained to seize wild-fowl. There does not seem to be any reference, however, to the use of this animal for hunting in Egypt. It looks as if the Minoan artist had inserted an episode drawn from a more Oriental quarter, and may have attributed to the Chita a function not properly his own.

Egyptian Caffre cats trained to catch ducks.

For the other animal, of cat-like aspect, our choice is certainly limited by the Nilotic character of the landscape in which it is set. It cannot be doubted that we have here a Minoan version of one of the hunting-scenes, dear to Egyptian painters, in which the domesticated Caffre cats are employed to capture wild duck amidst the papyrus thickets of the river-bank. Though the form of the head here is somewhat more weasel-like, the relatively dark back, contrasting with the paler under-part of the body and the subdued character of the spotting and striping, is quite characteristic of the Caffre cat.[2]

Indigenous Cretan versions—pheasants or water-fowl.

Wild cats are still known in the Island,[3] and we have seen this theme acclimatized by Minoan artists, and transferred to the rocky Cretan landscape on the fresco of Hagia Triada[4] and, in a more fragmentary shape, at Knossos,[5] while in both cases, apparently, the animal is engaged in chasing a pheasant instead of a water-fowl. In a part of the rocky background, indeed, of the Hagia Triada Fresco we see the papyrus of the 'Nile pieces' hybridized in the Minoan manner and turned into a kind of flower in

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[1] Only apparently in the interior of the ears of the leopard and the band round a duck's neck on Coloured Pl. XX, *d*. It is of a vivid red. In the coloured reproduction of this face of the blade in Perrot and Chipiez (vi, Pl. XVII) this feature is not indicated.

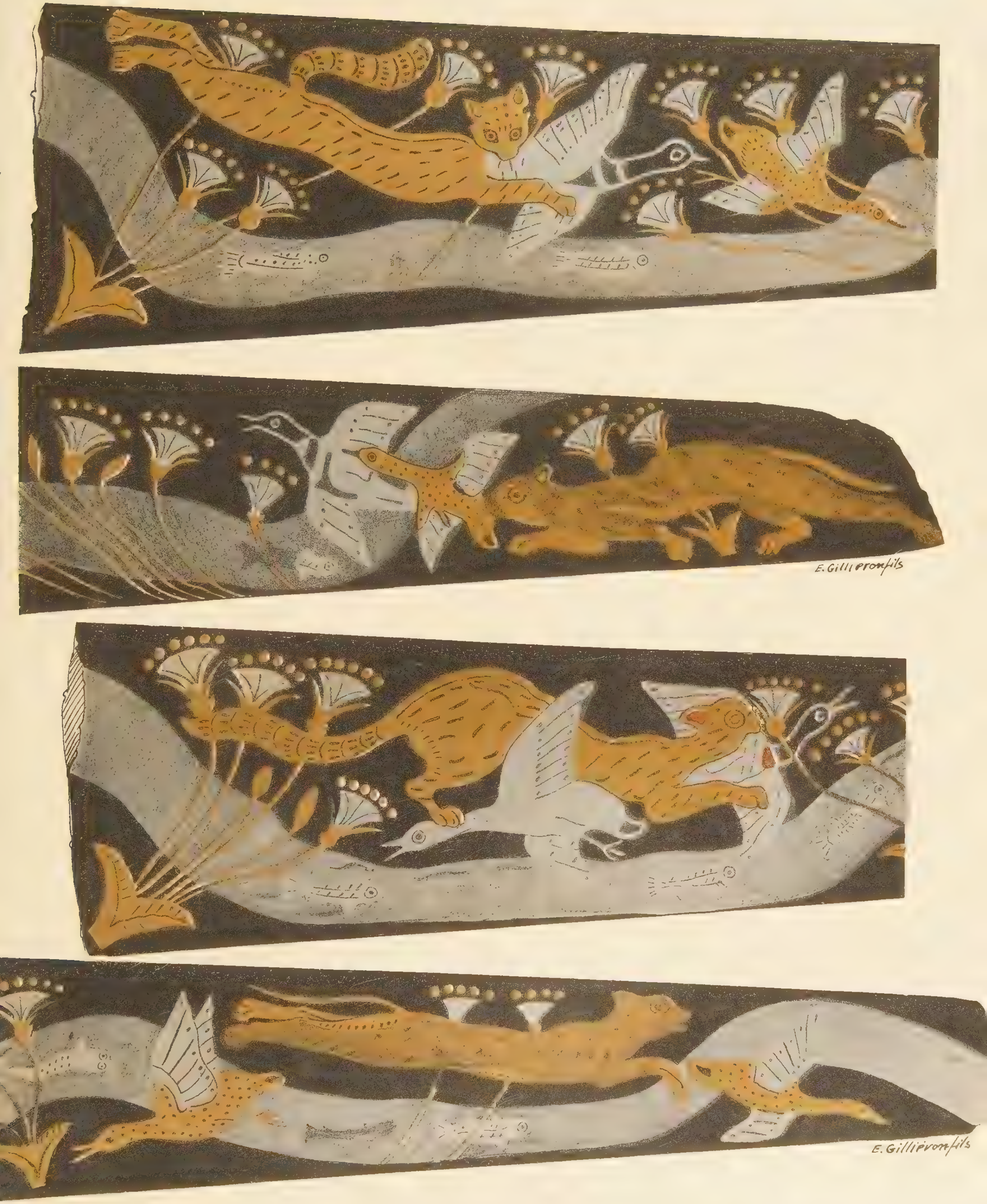
[2] *Felis Caffra*. Cf. R. Lydekker, *The Royal Natural History*, i, p. 421, Figure.

[3] A wild cat, *Felis agrius*, is not uncommon in Crete, and, according to Miss Dorothea Bate (in Trevor Battye, *Camping in Crete*, p. 255), 'seems to resemble most closely specimens from Sardinia'.

[4] *P. of M.*, i, p. 538, Fig. 391 (F. Halbherr, *Resti dell' età Micenea scoperti ad Haghia Triada presso Phaestos*, Pl. VIII).

[5] *Ibid.*, Fig. 392, A, B. The eye there is blue, like that of a Siamese cat.

PLATE XX


E. Gillieron fils
E. Gillieron fils

INLAID DESIGNS ON MYCENAE DAGGER-BLADE: CHITAS AND CAFFRE CATS HUNTING DUCKS ON BANKS OF NILE.

a fashion identical with that of the landscapes of the 'House of the Frescoes'. In that case we find these exotic blooms associated with animals adapted from the blue monkey of the Soudan.[1]

Influence of Nile scenes on Minoan ceramic art.

But the best evidence of the lasting influence of the Nilotic duck-hunting scenes on Minoan decorative tradition is to be found in the adaptations of the papyrus in its 'acclimatized' shape, as a constant theme of vase paintings, from the very beginning of the 'New Era' onwards to the last days of Minoan and Mycenaean Art. At times water-fowl are also introduced, as in the case of two interesting fragments of bath-pans of Cretan form from Phylakopi in Melos, the designs of which are clearly from the hand of the Minoan artist (Fig. 65, *a*, *b*).[2] There can be no reasonable doubt that the scenes here depicted reflect contemporary wall-paintings of the Knossian school,[3] indeed the conventionalized papyrus tuft as here rendered (Fig. 65, *b*) itself affords the best existing prototype of the typical shape in which it appears on amphoras of the 'Palace Style'.[4] On a painted *larnax*

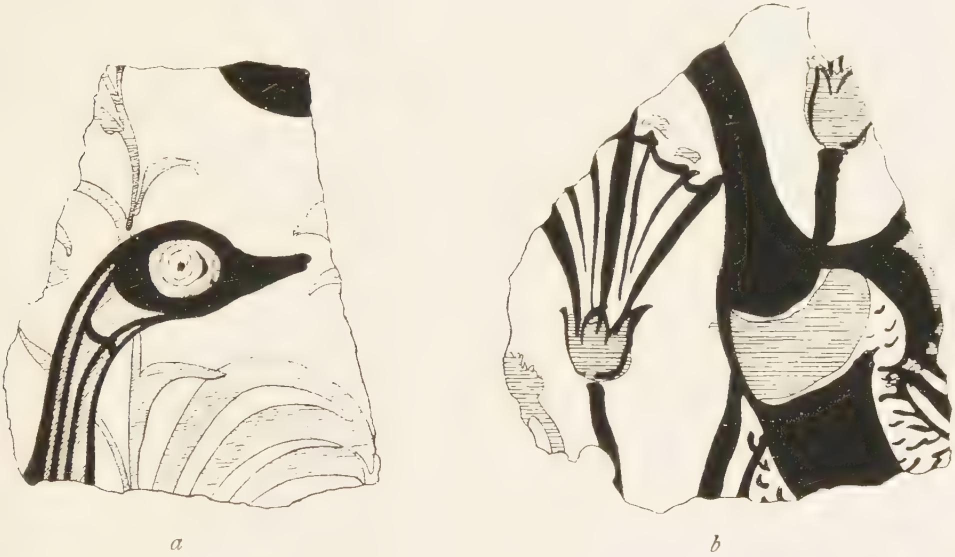


Fig. 65. Parts of Bath-pans from Phylakopi, with Designs of Water-fowl.

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[1] *P. of M.*, ii, Pt. II, p. 451, Fig. 264, and cf. Coloured Plate X.

[2] C. C. Edgar, *Phylakopi*, pp. 141, 142, Figs. 114, 115.

[3] A painted sherd from the same stratum at Phylakopi presents a flying swallow, where the manner in which the white colour is introduced into the bird's body and tail reflects the influence of fresco technique.

[4] E.g. *P. of M.*, ii, Pt. II, p. 477, Fig. 285, G.

from Ligortino[1] of L. M. III *b* date a further detail is introduced from the same Nilotic repertory, a butterfly fluttering in front of a water-bird.

Also frequent in intaglio types.

Among intaglio types water-fowl and papyrus clumps of the same origin had a long vogue both in Crete and Mycenaean Greece.[2] A lentoid bead-seal of green jasper from the site of Knossos[3] (Fig. 66, *a*) presents an exquisite group of three wild fowl amidst sprays of the conventional papyrus, resembling those of the dagger-blade. Sprays of the same kind appear on the haematite bead-seal from Central Crete (Fig. 66, *b*), and very large clay sealing, showing papyrus tufts of similar type, was found, in a L. M. II medium, in connexion with the Arsenal,[4] North-West of the Knossian Palace (Fig. 67). The birds here are in two fields, separated by a horizontal line, an arrangement which resembles that of some of the later wall-paintings forming double horizontal bands, as for instance the 'Camp Stool Fresco'. In these cases the ducks are still undisturbed. At times they have spread their wings for flight, as on the haematite lentoid Fig. 66, *b*,[5] and on a sardonyx of the 'almond' shape from the Vapheio Tomb.[6] Nor is the representation of the

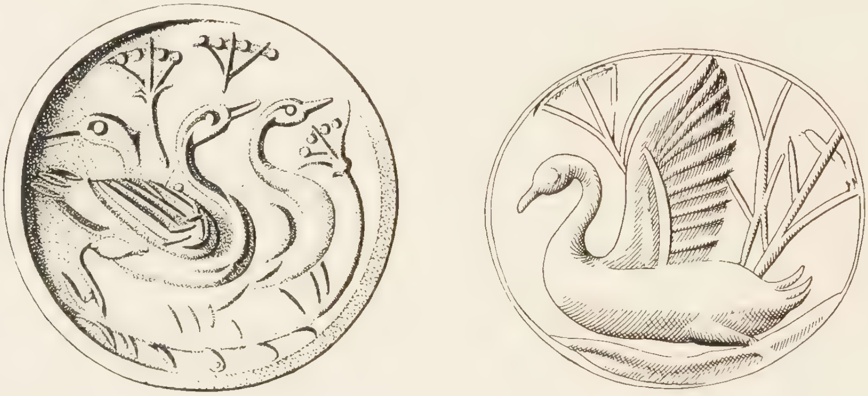
a *b*

FIG. 66. WATER-FOWL AND PAPYRUS: *a*, ON GREEN JASPER BEAD-SEAL, KNOSSOS; *b*, HAEMATITE LENTOID, CENTRAL OR EASTERN CRETE.

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[1] Now in the Louvre: I had occasion to copy it at Ligortino itself shortly after the discovery of the tomb.

[2] A duck standing by itself already appears on a M. M. II *b* prism seal in my collection, but there is no Nilotic ingredient.

[3] Given me in 1899 by Dr. J. Hatzidakis.

[4] A. E., *Knossos, Report*, 1904, p. 56, Fig. 19, and p. 57. On a haematite lentoid from Praesos ('Εφ. 'Αρχ., 1907, Pl. VIII, 123) there is a coarsely executed design of two pairs of ducks in reversed positions, similarly divided by a horizontal line.

[5] From Central or Eastern Crete, Candia Museum, Xanthudides, 'Εφ. 'Αρχ., 1907, Pl. VII, 66. Compare, too, the pair of water-fowl on a black steatite amygdaloid bead-seal from East Crete (*loc. cit.*, No. 97), and cf. No. 153 (haematite, E. Crete).

[6] 'Εφ. Αρχ., 1889, Pl. X, 19.

feline animal hunting the water-birds wanting. On a haematite intaglio from the Merabella Province, East of Knossos (Fig. 68)[1], of spirited design, a cat in a papyrus thicket seizes a flying duck by the joint of the wing, like the Chita on the dagger-blade (Coloured Plate XX, *a*). As there, too,—to complete the parallel in detail—a papyrus spray fills the angle. On another similar stone (Fig. 69) the cat springs on the bird from behind, who looks back too late.

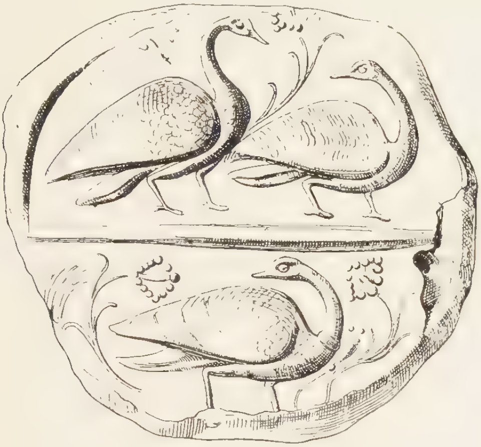

Fig. 67. Clay Sealing found near 'Arsenal', Knossos.

Duality of scenes on daggers.

A suggestive feature in the composition on either side of the blade of the dagger presenting the duck-hunting scenes is the clearly marked intention in each case to depict two parallel or successive episodes rather than one continuous composition. The ease with which the whole can be dichotomized is illustrated by the Coloured Plate, where it has facilitated reproduction in two sections.

This duality again strikes the eye in the case of the dagger illustrating the lion-hunt described below, and in the companion piece of the lion hunting gazelles. Elsewhere a triple division is as clearly marked. We see it in the blade with the three coursing lions, and again in the restored design of three swimmers shown in Fig. 81 below. On the Vapheio Cups a triple division is recognizable in both cases.

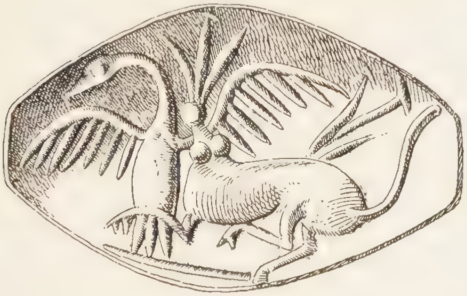

Fig. 68. Haematite Amygdaloid, Merabella.

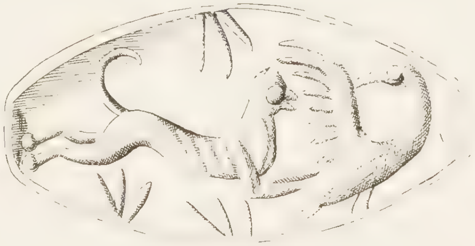

Fig. 69. Haematite Amygdaloid (Crete).

Also division into three—as on Vapheio Cups.

Dividing up of designs reflects

This repeated practice of cutting up a subject that might well have been represented as continuous into two or three sections easily explains separate panels of fresco technique.

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[1] In my Collection.

itself if we regard it as a reflection of the conditions of the Minoan wall-painters' art. For reasons connected with the rapid procedure involved in true fresco painting on the still moist lime-plaster[1] it was necessary to break up the wall space into manageable panels. In the case of the Vapheio Cups, indeed, as it is hoped to show in a succeeding Section, the triple division visible in both of the designs[2] may go back to the architectural causes conditioning the setting out of great plastic prototypes that had originally run above to triple bastions on either side of the Northern Entrance Passage of the Knossian Palace.

The Lion-hunting Scene on Dagger-blade.

Lion-hunt on Mycenae dagger.

The noblest of all pictorial designs in inlaid metal-work is supplied by the blade representing Minoan warriors, armed as if for war with bow and lance, and protected by great body-shields, attacking a troop of lions.

In this case, again, the successive stages by which this masterpiece of metal inlaying was brought to completion are admirably illustrated by the drawings executed for me by Monsieur E. Gilliéron, fils, in Fig. 70, I, II, III.[3]

I here resume the results of Monsieur Gillieron's study.

Successive stages in execution.

Fig. 70, I, shows the bronze blade, in which the designs were sunk to a depth of half a millimetre. In Fig. 70, II, are indicated the inlays of thin gold (faintly shaded) and silver (plain white) cut out and hammered into the slightly sunken field—a kind of work for which there are many examples from Ancient Egypt. The surface was afterwards polished to make the blade smooth and to remove the hammer marks, of which some traces, however, remain; the blade itself was oxidized so as to form a kind of blackish brown patina, and this hard surface helped to contain the inlaid plates. This is reproduced by the dark grey tint of the blade.

As illustrated by Fig. 70, III, the plates were then engraved with a finely pointed instrument (*burin*) so as to supply the details and outlines of the scene, the engraved parts being brought out through the introduction of niello, here rendered as black. The gold of the lances is redder than that used for the warriors' bodies, the difference in hue being due to an admixture of copper. The great bull's-hide shield with its prominent boss has its characteristic quatrefoil spots inlaid with dark niello on the silver field as well as the shoulder-straps attached to the underside of the other shields: so, too, the golden outline of the naked limbs against the silver of the shields and of the bronze ground. Every detail is as delicately rendered as the whole group is skilfully composed.

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[1] See Mr. Noel Heaton's observations, *P. of M.*, i, p. 528.

[2] See below, p. 177 seqq.

[3] For a technical account of the inlays of this blade I must also refer to Dr. G. Karo's careful observations in *Arch. Anzeiger*, 1903, p. 159. He was of the opinion that there were traces among the inlays of iron oxide.

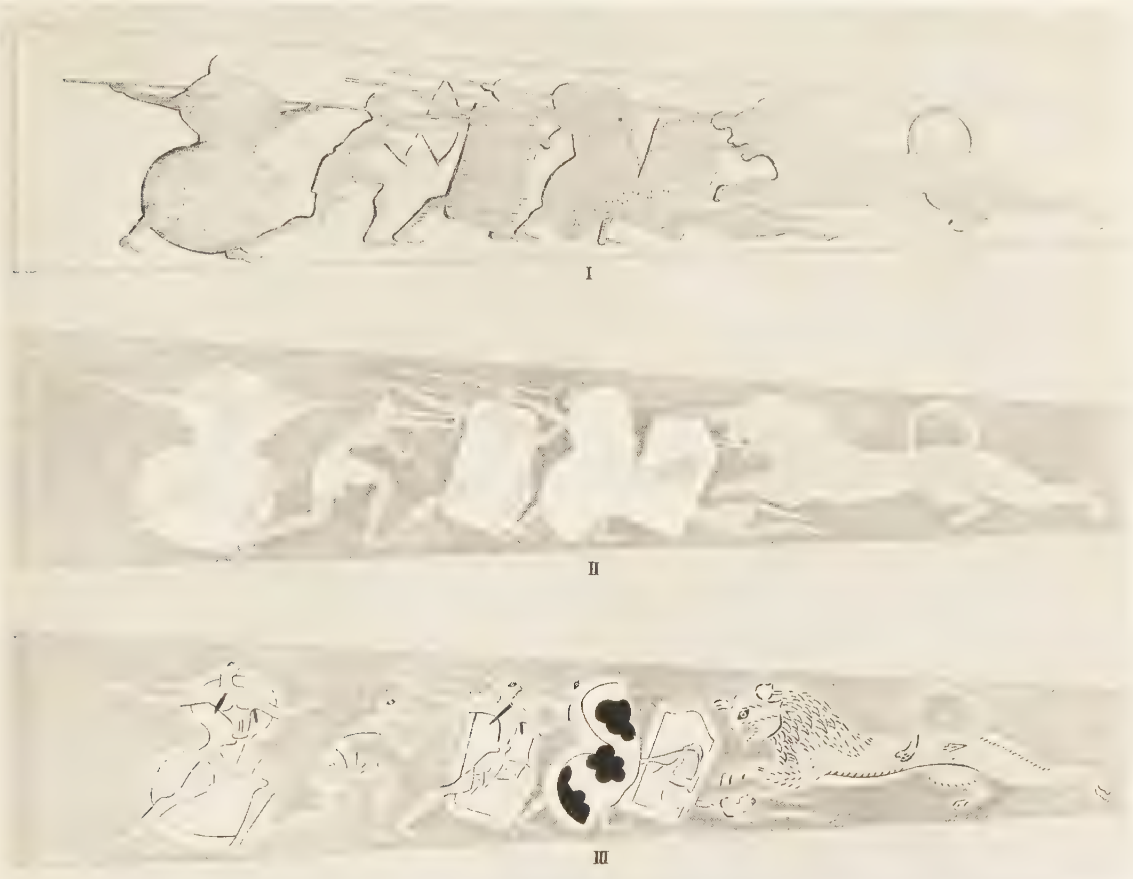

Fig. 70. Successive Stages in the Inlayed Design of the Lion-hunt on Mycenae Dagger-blade: by E. Gilliéron, fils.

Restoration of dagger.

Enough remains of the handle and pommel to admit of the complete reconstitution of this weapon as given in the electrotype facsimile (see Suppl. Pl. XLII).[1] Its pommel was covered with a gold plate showing lions in relief, and minute gold pins were hammered into the ivory plates of the hilt forming, in part of it, a delicate spiraliform decoration.[2] The skill displayed in the inlaid design on the blade, depicting the fight with the lion, is of supreme excellence and is visible in the grouping, the variety of incident, and the dramatic climax.

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[1] By Monsieur E. Gilliéron, père.

[2] This decoration by means of minute gold pins recalls that of a wooden dagger-hilt belonging to the Early Bronze Age of Britain

Duality of designs again marked.

In the case of this lion-hunting scene, the duality is, again, well marked, as seen in Fig. 71, *a* and *b*. Towards the point of the dagger two lions are depicted in wild flight, their flying gallop adapting itself to the narrowing space. They are separated by a distinct interval from the main subject of the composition, where the boldest of the troop of lions has turned at bay and charges the band of four hunters. These are armed as for battle, the spearmen with great body-shields of the 8-shaped and oblong variety, while the archer, who is shieldless, is seen in the usual half-kneeling position. All wear the short 'bathing drawers' of Middle Minoan tradition.[1] The lion at bay has been mortally transfixed, the spear-head protruding from his flank, but his onslaught is irresistible. The body-shield of his nearest adversary has been dashed aside, and he himself flung backwards, powerless and disarmed, beneath the mighty paws—with bent knees and outstretched arms above his head, in the same attitude as the fallen cow-boy on one of the Vapheio cups.[2]

Epic touch.

The warrior next behind, entirely covered with his great body-shield, awaits the impact of the onrushing beast, whose forehead he strikes with his spear. This stand over the fallen has itself an epic touch and, indeed, recalls the episode in the *Iliad* where the Telamonian Ajax stands forth to protect the body of Patroklos—holding his broad shield before him 'like a tower'.[3] For this struggle against the King of Beasts is real war, and the scene may have been as much an episode of heroic saga as that of the *Iliad*. It is in fact a pictorial record of a definite incident that may well have found its counterpart in contemporary lays, with the names of the individual heroes who took part in it.

Original drawn by eyewitness of lion-hunts.

Lions in classical Greece.

It can hardly be doubted that the artist from whose design the engrailed group was drawn had been an eyewitness of such a lion-hunt. The acquaintance of the Minoans with lions—rather, we may suppose on mainland than on insular sites—dates far back. They are frequent, indeed, on the ivory seals of the primitive tholos ossuaries of Messarà, both in intaglio and relief.[4] That they continued to inhabit Greece and its border-

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from Normanton, Wilts. (Colt Hoare, *Ancient Wilts.*, i, p. 204, Pl. XXVII, 2; J. Evans, *Ancient Bronze Implements of Great Britain*, pp. 231, 232 and Fig. 289).

[1] Compare the 'Goat-man' in the Zakro sealings, *P. of M.*, i, p. 707, Fig. 531, *a*.

[2] See below, p. 179, Fig. 123, A.

[3] *Iliad* xvii. 128: *φέρων σάκος ἠΰτε πύργον* (elsewhere, 132, *σάκος εὐρὺ*).

[4] E. g. the ivory seal, *P. of M.*, ii, Pt. I, p. 55, Fig. 26, where the lion seems to guard the dead body of a man.

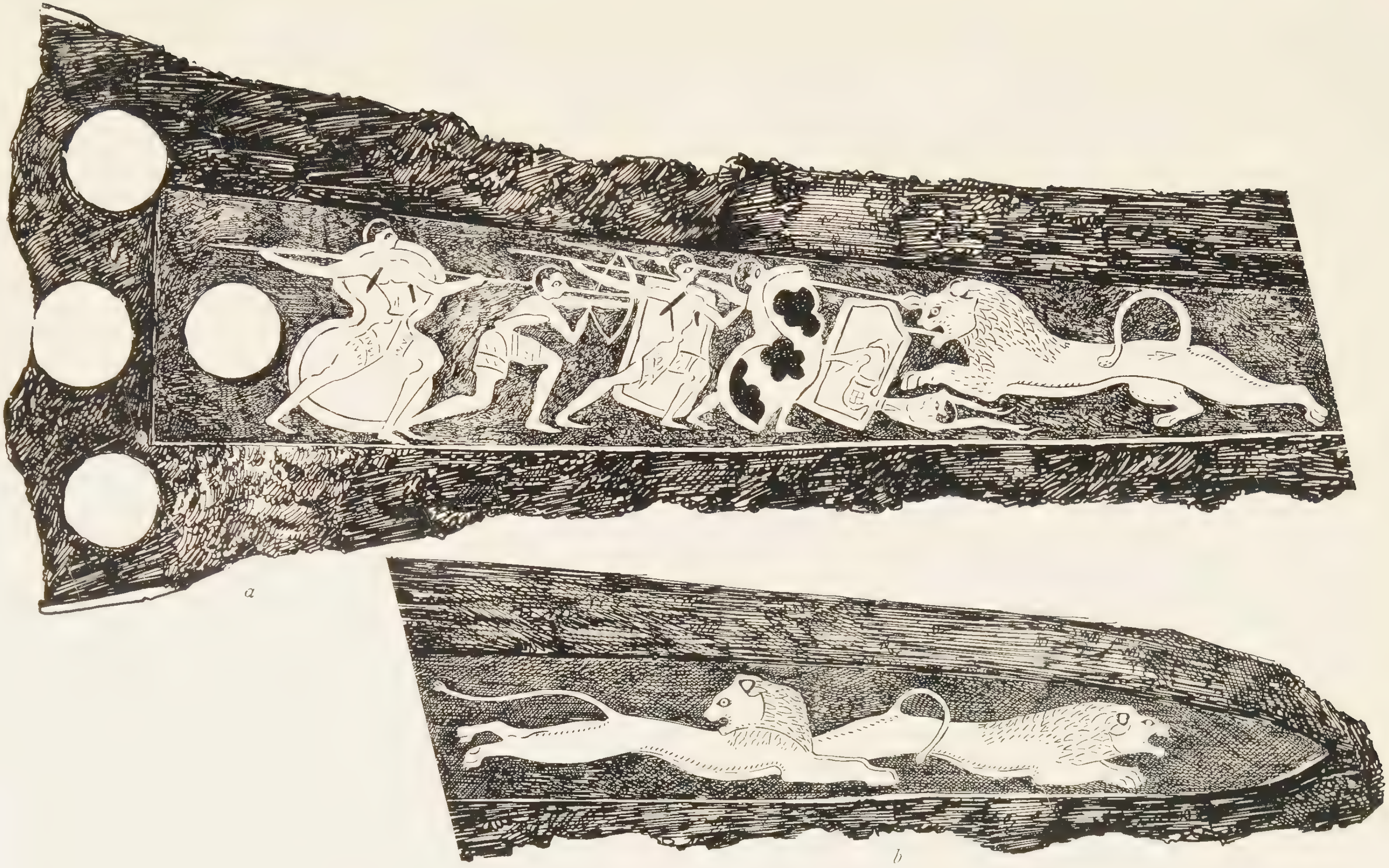

Fig. 71. Inlaid Dagger-blade depicting Lion hunting Scene from Fourth Shaft Grave, Mycenae.

lands over a thousand years later is shown by the well-known episode of lions attacking Xerxes' camels during his march in the neighbourhood of the Vardar.[1] The legend of Herakles and the Nemean lion, indeed, brings us to the very neighbourhood of Mycenae, and may reflect a stage in the extirpation of these animals, of which we have an actual record in the scene on the dagger-blade. At the same time,—such was the extended enterprise of the Minoans in the great days of their culture, and so frequent their relations with the farther shores of the Libyan Sea,—the possibility of some hunting expedition on the opposite coastlands cannot be altogether excluded.

It is to the African side, at any rate, that we naturally turn for existing comparisons.

Comparison with African scenes of lion-hunting in modern film 'Simba'.

Amongst these, certainly, the most thrilling commentary has been recently supplied by the remarkable film record of lion-hunting scenes in the Tanganyika Territory taken by the intrepid American travellers, Mr. Martin Johnson and his wife.[2] The object of the native lion-hunts recorded by them was in this case not for trophies or for meat, 'the whole movement was a defensive one; a sortie against lions that had been carrying off the black man's precious cattle'. 'I must say', observes Mr. Johnson, 'I admired their boldness in deliberately planning to fight lions with weapons as fragile as theirs and with no sort of defence against the animals' poisoned claws save their hide shields.' Javelins with iron heads were their only arm.

In order to equalize the chances in some degree, they attacked in a band of a score or more, a circumstance which leads us to infer that on the dagger scenes we have only a small part of the warring troop. Their ox-hide shields—which in this case covered only half the body—showed incurved bands in the middle of each side, giving an inner outline that recalls the 8-shaped Minoan type. In one scene displayed on the film a troop of four or five lions appears in headlong flight to the right, the hindmost with tail trailing behind, while one braver than the rest turns on his pursuers, his tail swinging above him. He springs on the foremost hunters, but is pierced by 'a salvo of spears shot from a score of hands. Taking the tearing claws on their shields the nearest blacks crouched low. Others rose to their full height and added their shafts to those already buried deep in the flesh of the quivering torso.' More than once the lion mauled a spearman, striking down his shield.

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[1] Herodotus, vii, c. 125. He adds, c. 126, that lions abound in that region and extend to the river Nestos (Mesta) in Thrace and to the Achelous in Acarnania.

[2] The film 'Simba' (= the lion) was shown in London during the autumn season of 1928 where I twice had an opportunity of seeing it. A *résumé* of part is given in Martin Johnson, *Safari* (G. P. Putnam's Sons, 1928), p. 264 seqq., but there is no description there of the scene on the film presenting the nearest parallel to that on the dagger-blade.

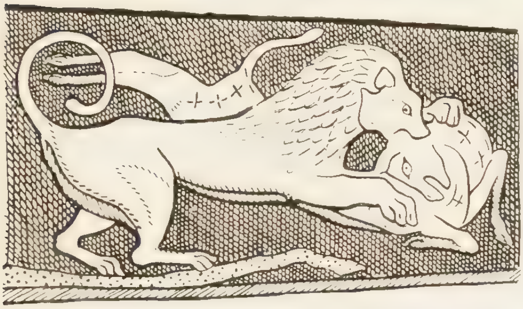

FIG. 72. LION SEIZING GAZELLE.

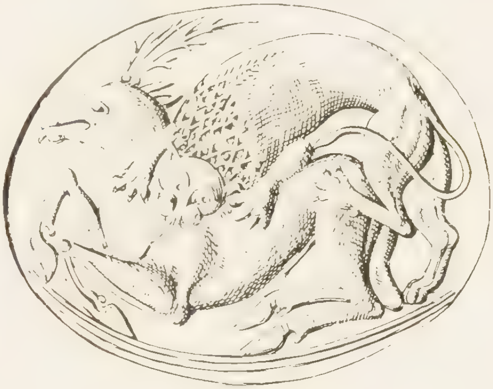

FIG. 73. LION SEIZING STAG: GOLD SIGNET-RING, THISBÊ.

Of the remarkable parallelism between this scene and that above described there can be no doubt. Details such as the relative position of the tails in the last of the flying troop and the beast at bay agree in the two cases. On the dagger, however, we have to do entirely with 'white' men, and the armature is purely Minoan.

Lion bringing down gazelle.

A first-hand knowledge of the great beast is also shown by the inlaid design on the other side of the blade presenting the hunting scene.[1] A lion here springs on a gazelle—in the instinctive manner of the beast of prey, fastening on the cervical vertebrae, so as at once to paralyse his quarry (Fig. 72).[2] A Thisbê signet depicts a lion gripping a stag in a like manner (Fig. 73). The same action is seen in the case of a lion seizing a bull on a fine intaglio from the Vapheio Tomb (Fig. 74),[3] and another from Thisbê (Fig. 75). On the dagger two pairs of gazelles escape beyond at a flying gallop, the two groups being separated by a distinct interval, so that the whole design—like those on the Vapheio Cups—is divided into three. The cruciform rendering of the dapples on the flanks of the gazelles is itself an Egyptian feature—being taken over from the stellar crosses on the Cow of Hathor, like those of bovine types on Minoan 'rhytons'.[4] In the stag-hunt of the Late Minoan fresco at Tiryns[5] the deer are spotted in the same cruciform fashion. As in the case of the duck-hunting scene described above, Egypt, we see, was never far from the mind of these Cretan artificers, and it might be suggested that a certain slimness visible in the rendering of the armed hunters on the other side of this dagger-blade may have been the work of a craftsman steeped in the knowledge of Egyptian Art. It contrasts with the more sinewy portrayal of male forms usual in Minoan works.

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[1] A coloured reproduction of this is given in Perrot and Chipiez (vi), Pl. XVIII.

[2] See, too, *P. of M.*, i, p. 716, Fig. 539, *e*.

[3] 'Εφ. 'Αρχ., 1899, Pl. X, 18, and p. 166. On a sardonyx.

[4] *P. of M.*, i, pp. 513, 514, and Fig. 370.

[5] Rodenwaldt, *Tiryns*, ii, p. 143, Fig. 60 and Pl. XV.

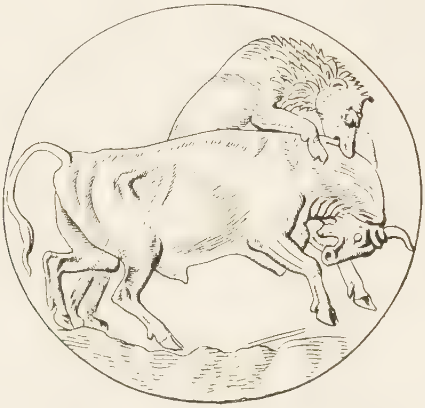

Fig. 74. Lion seizing Bull on Lentoid Intaglio : Vapheio Tomb.

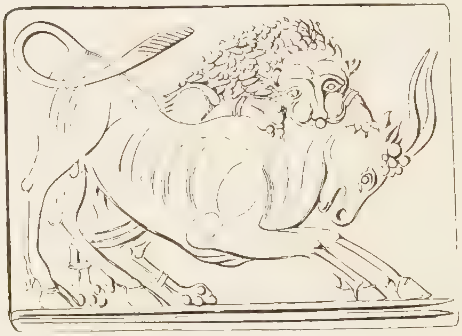

Fig. 75. Lion seizing Bull : Gold Bead-seal, Thisbê.

Fragment of painted relief of lion from S.E. Palace Angle.

Intaglio types derived from painted reliefs.

Of the lion in the painted decoration of the Minoan World we possess, among existing remains, only the fragment of stucco relief showing part of the neck and mane, with traces of red paint, from the South-East Angle of the Knossian Palace.[1] Doubtless the lions of the Mycenae Gate were also coated with painted stucco. But the dearth of actual pictorial remains is made up for by a numerous series of seal types, many of them,no doubt, excerpted from scenes on fresco panels. On an onyx lentoid from the Vapheio tomb,[2] indeed, we see a seated lion upon a graduated base (Fig. 76), such as has been already shown to be an architectonic feature.[3] Elsewhere a couchant lion appears on a similar stepped base.[4]

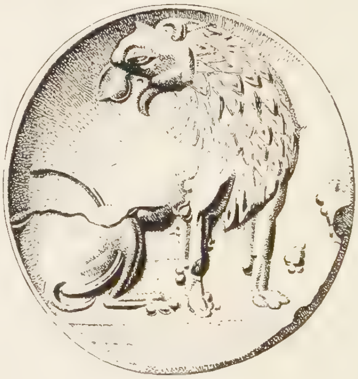

Fig. 76. Seated Lion on Lentoid Intaglio : Vapheio Tomb.

In one case a warrior, armed with a spear and an 8-shaped body-shield

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[1] *P. of M.*, ii, Pt. I, p. 333, Fig. 188.

[2] On a sardonyx amygdaloid also from the Vapheio tomb. 'Εφ. 'Αρχ., 1899, Pl. X, 27, and p. 167.

[3] *P. of M.*, i, p. 686 seqq. Compare Figs. 503, *b*, 504, 505, and p. 688, Figs. 506–8.

[4] 'Εφ. 'Αρχ., 1889, Pl. X, 3.

Type of hero stabbing lion on Mycenae bead-seal.

like the hunters on the dagger-blade, attacks a lion fully erect on his hind legs.[1] In several cases, however, the spearman is shieldless as on the gold bead-seal from Thisbê (Fig. 77). Still more remarkable—and indeed transcending the limits of human power—is the scene on the engraved gold bead from the Third Shaft Grave at Mycenae[2] (Fig. 78), where the hero is depicted as seizing the great beast by the neck and stabbing it with a short sword.

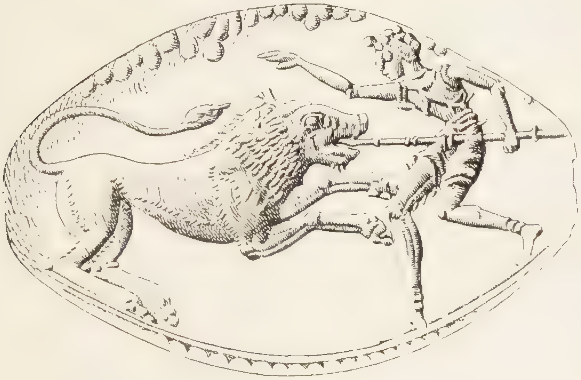

Fig. 77. Spearman and Lion on Gold Bead-seal from Thisbê.

Copied by third-century Greek engraver.

One of the most extraordinary phenomena—perhaps in the whole range of archaeological discovery—is that the design on this bead-seal, together with that of a sardonyx bead-seal from the same Shaft Grave, apparently representing a combat of two heroes with great body-shields, were revived by a Greek engraver of about 300 B.C. on the two sides of an ivory ring-bezel of that date.[3] This was found in a tomb of the Canea (Kydonia) district, together with two others of the same material and characteristic shape presenting typical Greek

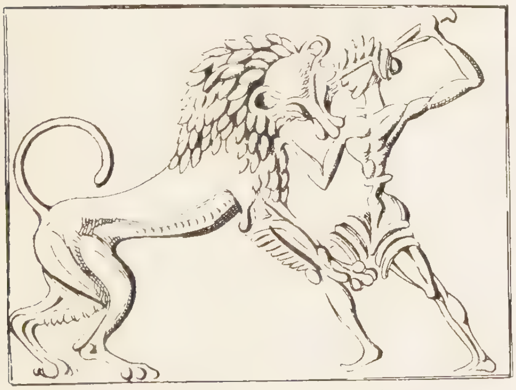

Fig. 78. Warrior stabbing Lion, on Gold Bead-seal, Mycenae.

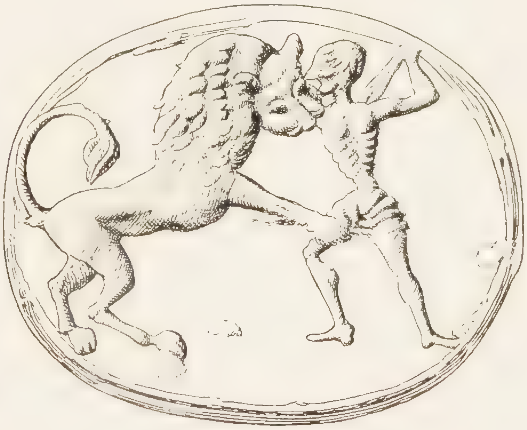

Fig. 79. Warrior stabbing Lion, on Ivory Ring-bezel, from Hellenistic Tomb, Canea.

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[1] On a black paste of lentoid type also from the Vapheio tomb (*ibid.*, Pl. X, 7). The figure of the hunter is imperfectly preserved.

[2] Schliemann, *Mycenae*, p. 174, Fig. 253.

[3] See my Address on *The Minoan and Mycenaean Element in Hellenic Life* (*J. H. S.*, 1912, p. 281 seqq.), p. 294 seqq., and p. 295, Figs. 7 *a*, 7 *b*.

Canea find.

intaglios of that epoch and all alike set swivel fashion in silver hoops. Notwithstanding the double coincidence that it involves, the two Minoan designs here brought to light are certainly copied from the two Shaft Grave examples or from very exact replicas of the same with several divergencies due to misunderstanding of the originals by the later engraver.[1] Since, in any case, the authenticity and considerable age of the whole group cannot be questioned, we have here clear instances of a revival by a Hellenistic artist of types belonging to the earlier civilization—recalling the imitation of classical forms of which we have such repeated illustration in the days of the Italian Renaissance.

In comparing Fig. 79 with Fig. 78 the differentiation from the earlier design is very instructive. The lion is less sinewy and mighty. The hero's hinder foot—as only in later scenes of contest—points backwards. The Minoan 'shorts' have become unintelligible and the belt is omitted. Finally, the short-sword, impossibly directed by the hero behind his shoulder, is of the post-Minoan leaf-shaped type. Equally significant variations are visible in the companion piece. (See opposite, Fig. 80, *a*, *b*, and note.)

Many leonine types of Classical Age may thus go back to earlier models, informed by a fuller personal acquaintance with the great beast.

Minoans personally acquainted with lions in every aspect.

The lion, indeed, is too omnipresent in the Religion, as well as in the Art of the Minoans, not to have been known to their herdsmen and hunters in ordinary life. Lions, under a great variety of aspects and attitudes, are a constant theme of engraved gems. Males appear caressing their mates, lionesses with their cubs; often they are seen lying in pairs, looking different ways. A lion with his head down is nosing a trail, others grip stags or oxen or bear them in their mighty jaws, or, again, they dispute the possession of their prey. Sometimes they are seen in headlong flight, as on the dagger-blade; sometimes they are mortally wounded; in one case two hunters seize upon the carcase with the purpose, apparently, of securing the skin. The lion's head—itself an early hieroglyph—is a sacred symbol, six times repeated on the border of the great Mycenae signet. The sacral

Lion sacred to Minoan Goddess.

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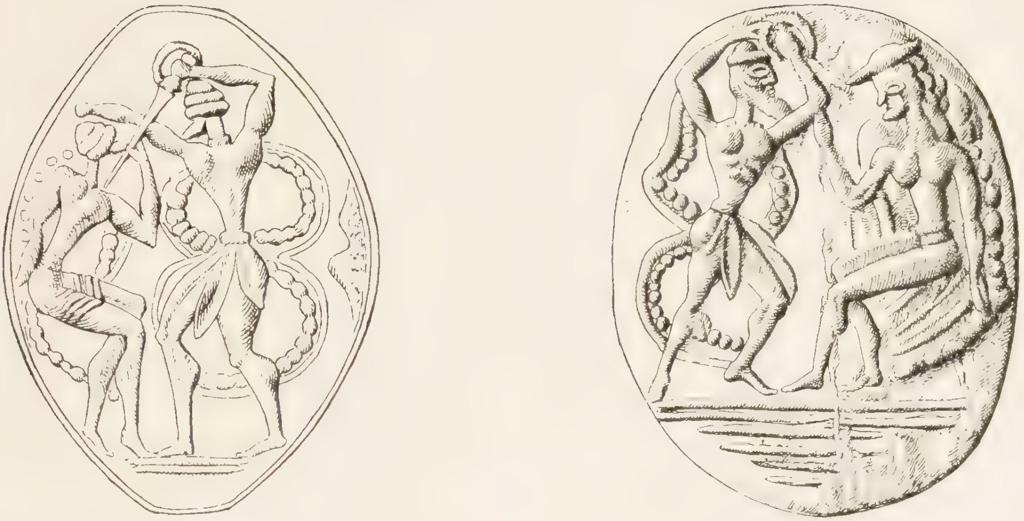
[1] The intaglio on the other side of the bezel is set beside its prototype on the opposite page, Fig. 80, *a*, *b*. The original is on a sardonyx. This was strangely mis-described by Schliemann (*Mycenae*, p. 202) as a man 'wearing a helmet with a long crest' (the studded border of the shield!) seated before 'a woman in a costly dress, open at the breast and with gold buttons' (the studs of the shield) and 'her head ornamented with a large crown'. This travesty of the subject was embodied by the artist in 'No. 313', unfortunately taken over by Milchhöfer (*Anfänge der Kunst*, p. 38, Fig. 43). The design, however, has been rightly published since Helbig's illustration (*Hom. Epos*, 1887 ed., p. 313, Fig. 119). It represents, in fact, two warriors, one stabbing the other, who is falling backwards on his shield (Fig. 80, *a*).



a *b*

Fig. 80. *a*, Sardonyx Amygdaloid: Third Shaft-Grave, Mycenae; *b*, on Ivory Bezel of Silver Swivel Ring, *c.* 300 B.C., from Hellenistic Tomb near Canea (Kydonia).

(The scene on *b* is copied from *a* in a reversed position as from an impression. Many details are misinterpreted, as in the companion piece (p. 125, Fig. 79). The 8-shaped shield of the man on the left of *b* is mis-shapen. The crest of the helmet of the original figure is converted into some kind of δίσκος, raised, as a weapon, with both hands. The shield on the back of the other figure is turned into a kind of seat and his attitude is that of sitting. The Minoan 'shorts' are omitted and his helmet is converted into a *petasos* with long locks of hair falling down behind. The seated figure wears a belt but no loin-clothing.)

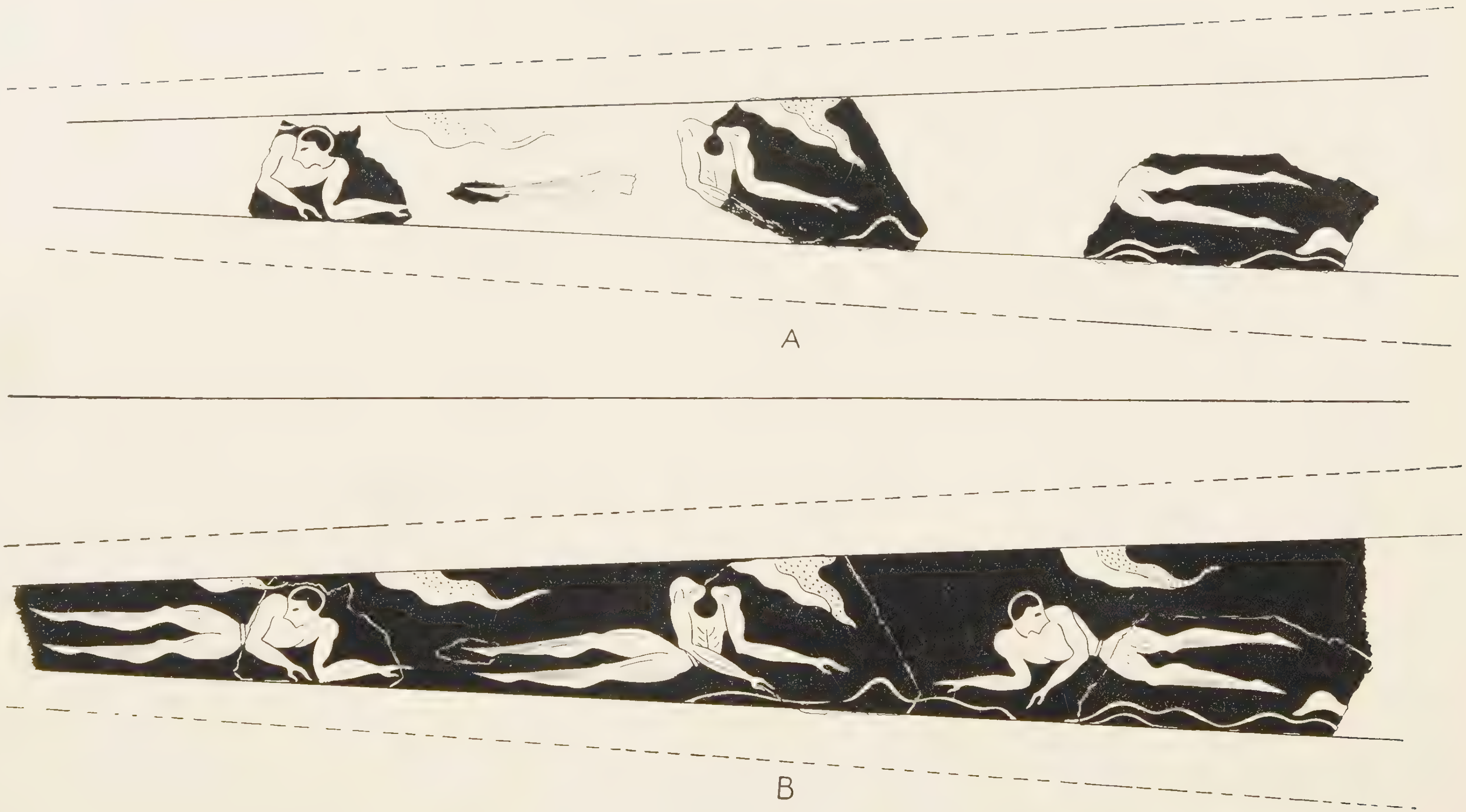


Fig. 81. Inlaid Design of Swimmers on Dagger-blade from Vapheio Tomb: a, The Fragments; b, Restoration of Design by Monsieur E. Gilliéron, fils.

'antithetic' subject of a male or female figure between pairs of lions is itself of constant recurrence, and they appear as supporters of the Minoan Rhea on the sealings of the Central Palace sanctuary at Knossos. They guard the portal of sacred precincts and, on the 'Ring of Nestor', a lion is seen couched at the entrance of the Nether World and tended by the little twin handmaidens of the Goddess.

The Vapheio Blade with Swimmers and that with Flying-fish.

Vapheio dagger-blade with inlaid designs of swimmers.

A recent discovery of remains of inlays belonging to a dagger-blade of the Vapheio tomb now enables us to add representations of swimmers to the subjects of this class of 'metal painting'. A similar theme, as already pointed out, is also found among the repoussé reliefs of the silver 'rhyton' from Mycenae, where shipwrecked seamen are seen endeavouring to escape from a dog-headed sea-monster.[1] In the present case swimmers by themselves are depicted, entirely naked and of the male sex, propelling themselves by means of a kind of side action. The fragments, of which there are five, are shown in Fig. 81, A, and a full restoration by Monsieur Gilliéron, fils, is given in Fig. 81, B.[2] The human figures and the tongue-like convention for rocks above are of gold plate inlaid in the bronze, the lines and dots being supplied by niello. The wavy outline indicating the sea below is produced by inlaid gold wires. The most curious feature is the crown of the head of the central figure, summarily rendered as a mere disk to be filled with dark niello. It may be observed that this summary representation of the heads of figures is also characteristic of a Late Minoan class of intaglio designs.

Flying-fish on Vapheio blade.

The flying-fish of the other series of inlays, belonging to a bronze weapon from the Vapheio Tomb,[3] were shown without their wings in Tsountas' original illustration. A further fragment has since been noted, which has enabled Monsieur Gilliéron, fils, to make the complete restoration shown in Fig. 82, *a*. These, in his opinion, belonged to a larger blade than the 'swimmers'.

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[1] p. 96 above, and Fig. 54.

[2] Owing to the oxidization of the remains these inlays escaped the notice of Tsountas in his publication of the contents of the Vapheio tomb in 1889. They were observed by Monsieur Gilliéron, fils, and their first publication and full description was due to Mr. Sp. N. Marinatos at present Cretan Ephor of Antiquities, in *Essays on Aegean Archaeology*, p. 63 seqq. Mr. Marinatos, however, in his restoration (*op. cit.*, p. 67, Fig. 2) endeavoured to bring into the design the gold inlays in shape of flying-fish that had for some years been recognized among the remains of the tomb. These, however, are of a very different scale and have no obvious connexion with the swimmers. Monsieur Gilliéron's view that they belong to a larger blade is doubtless correct.

[3] See Marinatos, *op. cit.*, pp. 65, 66 (Fig. 1) and Pl. XI, 5, 5, *a*, and restoration A. The resemblance to the Phylakopi fresco and the faïence fish of Knossos is there pointed out.

It will be seen at once that the flying-fish here depicted presents a close resemblance in style to those of the well-known Phylakopi fresco (Fig. 82, *b*), and, again, to those of the faïence panel found in the Temple Repository at Knossos, and their approximate date may thus be placed within at least the later borders of M. M. III.

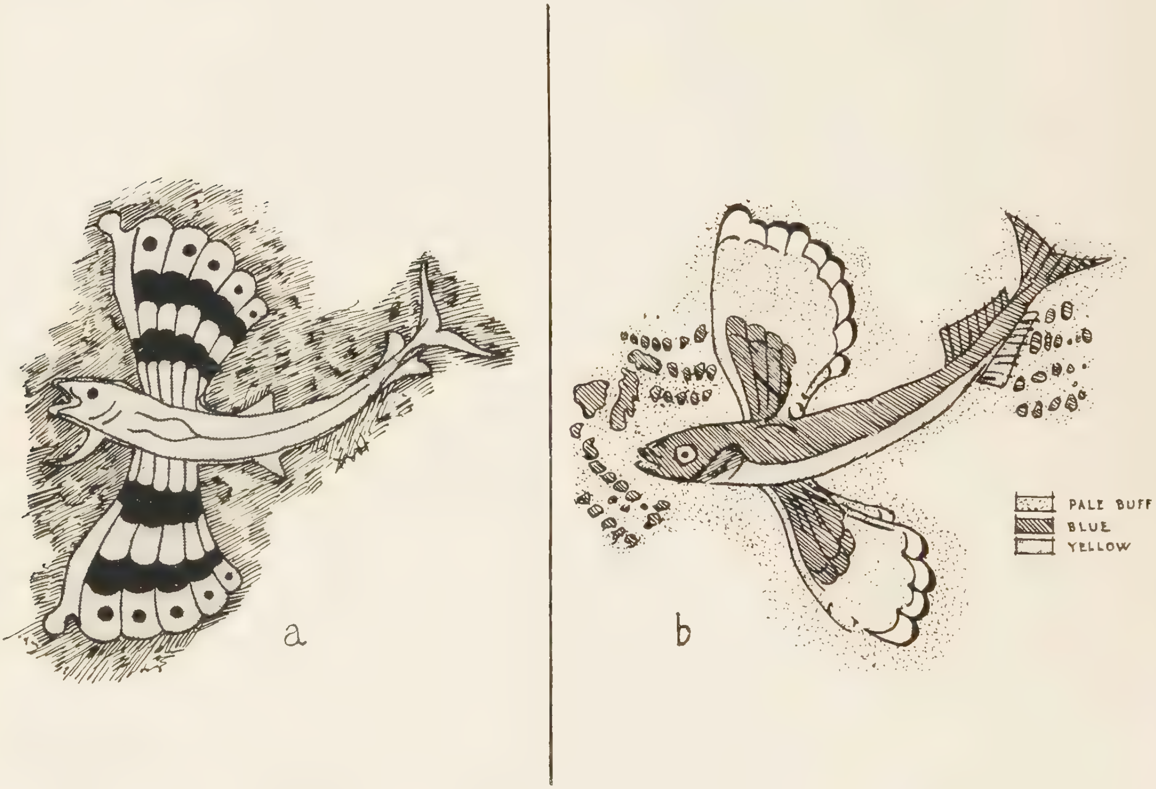

Fig. 82. *a*, Inlaid Design of Flying-fish on Vapheio Bronze Blade (restored by E. Gilliéron, fils); *b*, Flying-fish from Phylakopi Fresco.

It cannot be doubted that both designs are based on the common flying-fish of the Mediterranean, *Exocoetus volitans*—the Swallow-fish (χελιδονοψαρί of the native Cretan). A live specimen of this in the hands of a fisher lad is reproduced in the photographic figure (Fig. 83). The horn-like appendage below the gill in Fig. 82, *a*, is itself an adaptation of the 'barbel' seen dependent from the lower extremity of the mouth in the case of young flying-fish.[1] In the inlaid design, however, the artist has in other respects gone further in the decorative direction than the painter of the fresco. The spots, especially, in the margin of the wings, can hardly have been suggested

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[1] Cf. A. C. L. H. Günther, *An Introduction to the Study of Fishes*, p. 622.

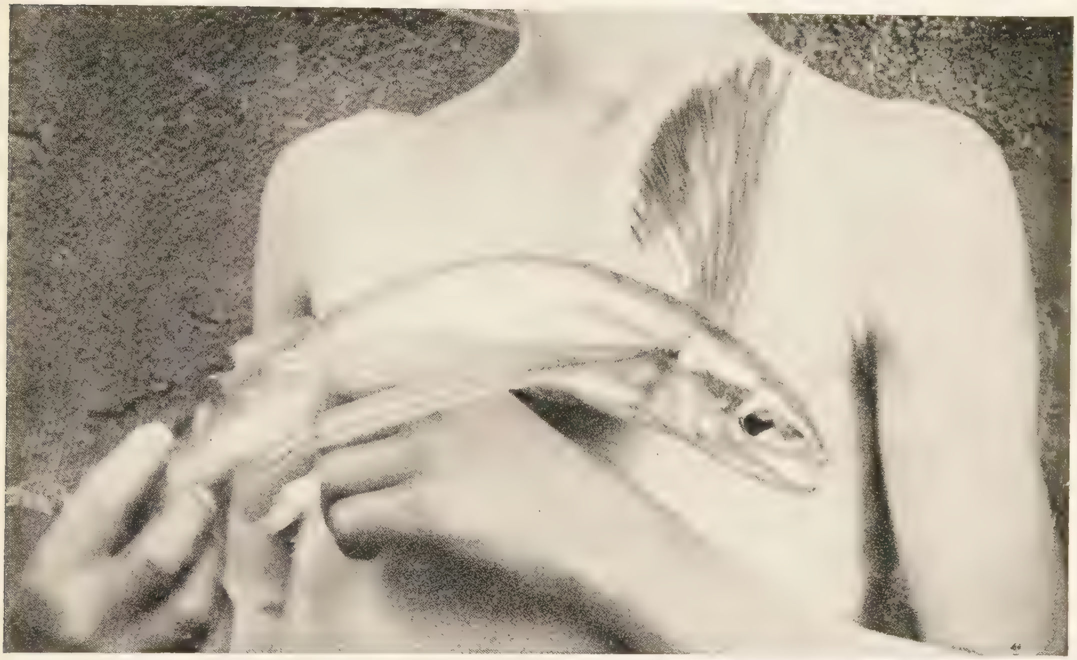

FIG. 83. FLYING-FISH IN HANDS OF FISHER LAD (NAPLES).

by the small and very faint spots on the wings of the original, just visible in Fig. 83. Even the little blue spots scattered over the wings of the other Mediterranean species, *Exocoetus Rondelettii*, cannot account for these. It seems probable that, as in the case of flowering plants like those on the walls of the 'House of Frescoes', we have here another instance of the eclecticism of Minoan Artists who, according to their lights, improved on Nature and produced hybrid forms to suit their own taste. It certainly looks as if in this case the spotted margin of the wings had been suggested by those of a species of Gurnard—a fish with wing-like fins rivalling those of flying-fish.

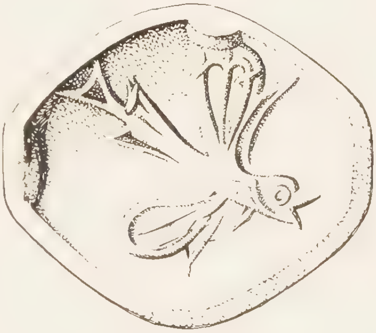

FIG. 84. FLYING-FISH ON AMYGDALOID BEAD, KLÍTARA.

It is interesting also to compare with the inlaid design that on a cornelian bead-seal of amygdaloid type,[1] in the free style of the early part of the New Era, on which a similar barbel-like appendage is visible (Fig. 84).

Inlaid Lilies on Mycenae Blade derived from Fresco Band.

Lilies on inlaid blade based on fresco band.

We are led to another close parallel between these naturalistic designs in metal-work and those of M. M. III wall-painting, including the Miniature style. The inlaid bronze dagger with a gold-plated hilt from a Mycenae Shaft Grave shows on the flat midrib of the blade a series of finely inlaid lilies, repeated in repoussé work on the plates of the hilt. This is here reproduced opposite (Fig. 86) from the restoration by Monsieur Gilliéron, père.[2]

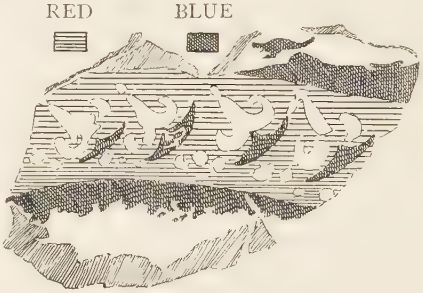

Fig. 85. Miniature Fresco Fragment with Rows of Lilies. From N.W. of Palace, Knossos.

Lily inlays: M. M. III parallels.

But this inlaid design stands in the closest relation to certain painted stucco pieces of this time, on which lilies are similarly repeated. A fresco fragment from the Palace (Fig. 85), found in association with the embroidery designs described above,[3] shows a slightly curving series of white lilies—their red stamens coalesced in the conventional manner—on a blue smalt ground, with undulating white beads below. The dagger-blade itself, moreover, has supplied the basis for the restoration of a dado band, showing white lily flowers with yellow stamens on a crimson ground, naturally treated as on the blade, from a room of the earlier Palace at Phylakopi (Fig. 87 [4]). This room opened out of the Pillar Room, in which the 'Flying-fish' fresco was found, and like it and the other important fragments of painted plaster there brought to light, the lily border must be regarded as the work of a Knossian artist of the M. M. III Period.

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[1] Acquired by me at Athens in 1896 and said to have been found at Klítara (Kleitor), in Arcadia.

[2] A coloured reproduction of the best preserved part of the blade and hilt is given in Perrot et Chipiez, vi, Pl. XIX, 5. The technique is described by Karo, *Arch. Anz.*, 1903, p. 160.

[3] p. 37 seqq. From the undulating bands of this lily pattern we may infer that it was also an embroidery design. It belongs, therefore, to 'Miniature' fresco designs of that group.

[4] From Mr. Theodore Fyfe's restored drawing. Cf. Bosanquet, *Phylakopi*, pp. 75, 76, and Fig. 64. The espaced distribution of these designs of lilies recalls a fragment of a bronze sword-blade from Thera, presenting a series of inlaid gold axes. These are of fine gold, set into a niello plate. In the Copenhagen Museum, Worsaae, *Aarbøger for Nordisk Oldkyndighed og Historie*, 1879, Pl. VIII (*Mémoires de la Société royale des Antiquaires du Nord*, 1872–7, p. 234 and Pl. VIII); Perrot et Chipiez, vi, p. 974, Fig. 550.

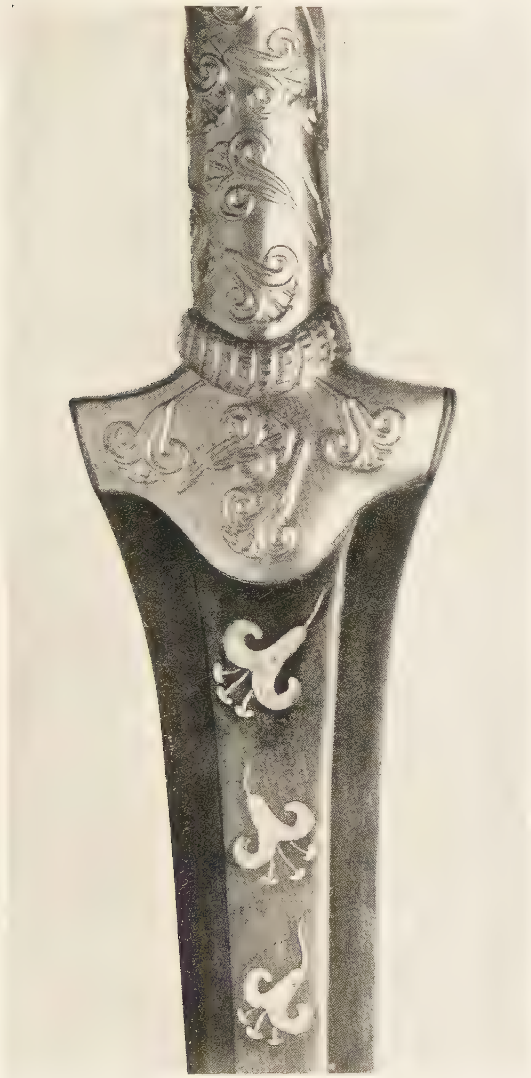

Fig. 86. Inlaid Bronze Dagger with Gold-plated Hilt (as restored): Mycenae.

In the case of the dagger, too, the resources of the metal-worker were such as to enable him to suggest the varying tints of the flowers. The petals are here executed in pale electrum, and the red anthers are distinguished from the filaments by a greater admixture of gold. The background of the design was here a hard niello plate, consisting of an alloy of silver and iron, inserted into the blade and into which were hammered in a cold state the gold and electrum inlays.

In the last cited examples it is possible to trace a definite relation between fresco designs more or less of the Miniature class and such *tours de force* of inlaid metal-work. The endeavour, within the limits of the technique, to reproduce the actual colouring as well as the design was in itself the same as that which inspired the painter's Art.

Masterpieces of inlaid metal-work recorded in Greek epic.

It cannot be doubted that the living record in Greek Epic of great traditional masterpieces of intarsia work imply on the part of those who first commemorated such objects in their lays a first-hand knowledge of Minoan works of this class. Helbig rightly pointed out, long since,[1] that the Phoenician metal-work of the Sixth and Seventh Centuries before our era—even in the case of the bowls that show a partial overlaying of another metal with a gold plate—does not supply by any means an adequate source for the varied details and the delicate nuances of contrasted effects in the metal inlays, such as we find in the Homeric description of the Shield of Achilles, forged by Hephaestos.

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[1] *Homerische Epos* (1887 ed.), pp. 408, 409.

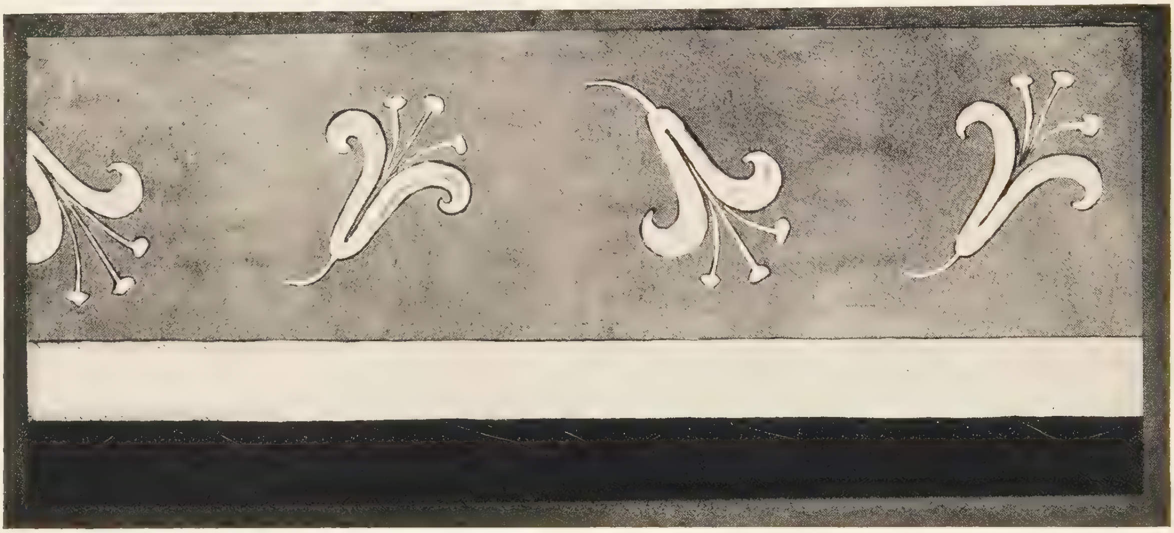

FIG. 87. FRIEZE OF LILIES, PHYLAKOPI (RESTORED); M. M. III WORK.

Implied knowledge of Minoan originals.

What other Art, indeed, could have rendered such a scene as that of the vineyard there described? The impression conveyed by the poet's words is that of one who had actually in view some great work of intarsia in metal executed by similar methods.

'Also he set therein a vineyard teeming plenteously with clusters, wrought fair in gold: black were the grapes, but the vines hung throughout on silver poles. And around it he ran a ditch of cyanus, and round that a fence of tin.' [1]

The contrast here of the gold, the black grapes, and the silver poles curiously recalls the effect produced on some of the above designs by the skilful introduction of ruddy gold, pale electrum, and niello in the details. In the case of the ploughed field, described shortly before, we have the same suggestion of the dark niello, which served both for the background and details of the inlaid dagger-blades, and here, again, it is set off by details in gold.

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[1] *Iliad* xviii. 562–5 (Lang, Leaf and Myers' translation, p. 383). It must be noted, however, that tin, though used by the Minoans for their bronze alloys, has not as yet been ascertained to exist as a separate element in the Minoan inlays.

'Furthermore, he set in the shield a soft fresh-ploughed field, rich tilth and wide, the third time ploughed, and the ploughers therein drave their yokes to and fro as they wheeled about. . . . And the field grew black behind and seemed as it were a-ploughing, albeit of gold, for this was the great marvel of the work.'[1]

Such descriptions—like so many other appurtenances of the Heroic Age in Greek epic—carry back the reminiscences of Minoan life at least to the early part of the Sixteenth Century before our era. This marvellous technique in metal inlay—so far as its existing remains show—did not survive the epoch that marks the acme of Minoan Art. By the date even of the first appearance of the Achaeans, whose bards celebrated these fabled works, as an historic factor in the Aegean basin, the period of its vogue was already left behind. As to the tribes who entered the Greece that was to be some fifteen generations later than it, a practical acquaintance with such delicate manipulation of metals—in its results, as we have seen, almost rivalling the painter's art—was out of the question. Their armourers, indeed, had for the most part to deal no longer with bronze—the Minoan basis of these works—but with hard iron.

Yet the Art itself extinct at time of Achaean invasion.

Neither can we suppose that the knowledge that is displayed in Greek epic of such masterpieces of intarsia work could have been due to the mere rifling of ancient treasures or to the chance discovery of tombs. Like many other details that are there supplied of Minoan life and culture in its greatest days, the descriptions themselves must be taken to date from the time when the objects themselves were in use, and when the technique that they imply was still practised.[2]

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[1] *Iliad* xviii. 549:

ἡ δὲ μελαίνετ᾽ ὄπισθεν, ἀρηρομένῃ δὲ ἐῴκειν
χρυσειή περ ἐοῦσα· τὸ δὴ περὶ θαῦμα τέτυκτο.

Lang, Leaf and Myers' translation, pp. 382, 383.

[2] In my Address on *The Minoan and Mycenaean Element in Hellenic Life* (*J. H. S.*, 1912, p. 274 seqq.) I have invoked as an explanation of these phenomena a bilingual stage in the population of the Morea and Northern Greece such as we know to have been the case, down to a late Classical date, in Crete. In this way the old 'Hellado-Minoan' or Mycenaean population may have handed on from their Minoan masters descriptive materials preserved in their own ancient lays, and these in an adapted form have in turn been embalmed in Greek epic. The process may indeed have begun early. That there were Greeks in Hellas before the coming of the Achaeans is quite possible. They may even have formed part of the population before the actual conquest of large Mainland tracts by the Minoan Cretans. The early diffusion of 'Minyan ware' from a N.E. Aegean source points to a very primitive line of connexion,—in the direction where we should most naturally seek a proto-Hellenic population.

§ 74. PICTORIAL RELIGIOUS SUBJECTS ON SIGNET-RINGS, REFLECTING MINIATURE STYLE: THE 'RING OF NESTOR'—GLIMPSE OF MINOAN AFTER-WORLD.

Pictorial Religious Subjects on Class of Signet-rings—dependence on frescoes; Frescoes of religious nature; Mycenae painted tablet with descending God; Descending deities on Signet-rings; Landscapes with rustic cult compared with Pompeian paintings; Sacred Spring and Trees on ring; Marine subjects; Descending God on painted 'larnax'; Offertory scenes on H. Triada Sarcophagus; 'Sarcophagal' Art; Origin of Minoan signet-ring from bead-seal—primarily designed for suspension; Mourning scenes on signet from Vapheio Tomb—Dual composition of design; Ecstatic effect of fruit of Sacred Tree; Funereal significance of body-shield; Parallel design on Mycenae ring; Similar ritual refreshment of Goddess; Separate scene of mourning at grave hung with little shield; Association of Goddess with boy-God; Religious scenes nearer to the Christian than to the Classical Spirit—Syrian and Anatolian affiliation; Signet-rings made for use in this World and the next—ensured protection of divinity; The 'Ring of Nestor': circumstances of finding and recovery; Arrangement of bezel in compartments and zones by trunk and branches of 'Tree of the World'; Comparison with Yggdrasil and 'Tree of Paradise'; Interpretation of design; Butterflies and chrysalises symbolical of Resurgence; Young couple reunited in death; Chthonic aspect of Minoan Goddess; Her life-giving power; Lion Guardian of Under-World; Initiatory examination by Griffin as Chief Inquisitor; First insight into Minoan eschatology; A true Elysion, in contrast with Hades; Translation of design into Miniature Fresco; Reflection of an original masterpiece in wall-painting representing the After-World.

Pictorial religious subjects on class of signet-rings.

PICTORIAL elements on a more microscopic scale enter largely into the composition on engraved gems and especially of signet-rings. It has been already shown to what an extent the sports of the bull-ring, the bull-grappling scenes of the open, the wrestling and boxing bouts, and other scenes were thus epitomized within a small compass from larger or smaller originals existing on the wall.[1]

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[1] Cf. *P. of M.*, i, p. 669 seqq., § 31, 'Seal Types and their Relations with Greater Art.'

Pictorial Religious Subjects on Signet-rings.

In particular there exists a whole class of gold signet-rings, derived mainly from sepulchral deposits, presenting scenes of a religious nature and executed in the same picturesque style. It is a fair conjecture that the subjects of these were in many cases excerpted from paintings on the walls of shrines, analogous to the Miniature Frescoes described above. It has, indeed, been already pointed out that the fresco of the present series depicting the 'Sacred Grove and Dance' finds its best supplementary illustration in the intaglio design of a gold ring found in the first discovered of the built tombs at Isopata.[1]

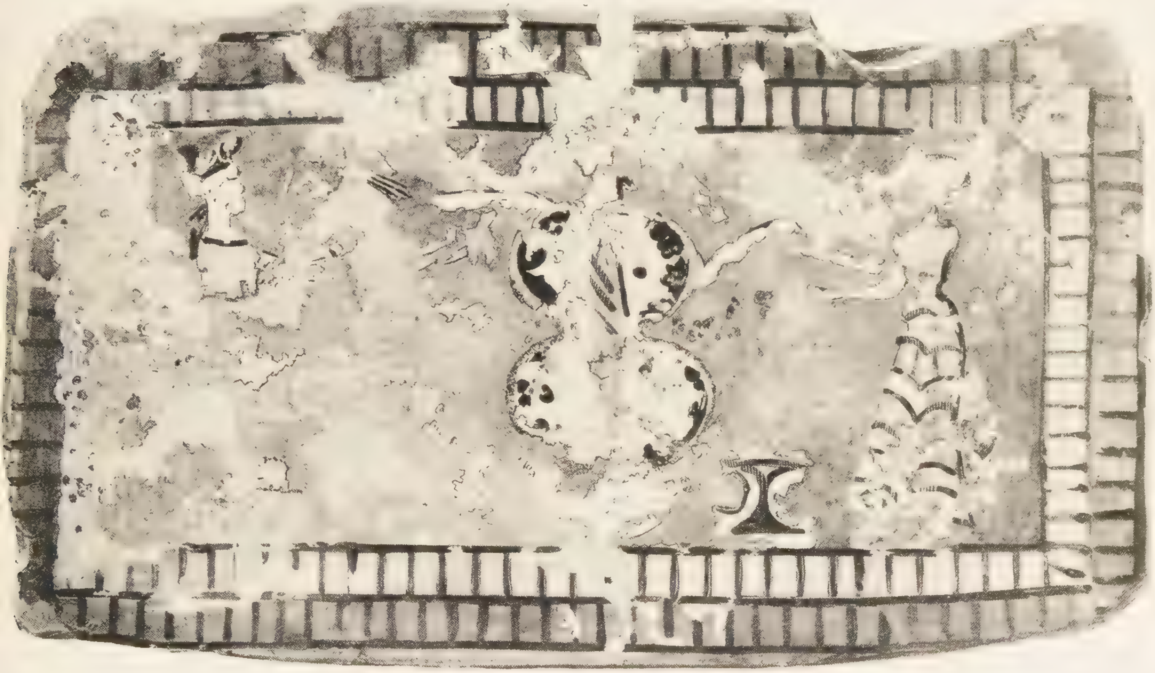

Fig. 88. Painted Plaster Tablet from Mycenae.

Dependence on frescoes.

The religious connexion of this group of Miniature paintings is itself well brought out by the Columnar Shrine of the Goddess which forms the central feature of the panel displaying the Grand Stands, the spectators on which are looking on at some festival in her honour. Elsewhere, and identical in scale with the true Miniature Frescoes of Knossos, an example of a religious subject is supplied by the painted plaster tablet found by

Frescoes of religious nature.

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[1] See above, p. 68, Fig. 38.

Mycenae tablet with descending God.

Tsountas at Mycenae (Fig. 88).[1] On this, in a scene containing two female votaries and an altar, may be discerned what by other analogies can be identified as an armed divinity—in this case female, as is shown by the white skin—brought down as elsewhere by due offerings and incantations, and largely covered by a great 8-shaped body-shield of the Minoan class.

Descending deities on signet-rings.

The descending divinity, male as well as female, seems also to have been a recurring subject of signet-rings of the present class, which had perhaps a specially sepulchral distinction. It has been already mentioned that one of the first relics brought to light in recent years from the site of Knossos was a gold ring belonging to the present category on which a small armed God, invoked by a female votary, is seen descending before his obelisk in front of a pillar sanctuary enclosing in its precincts a sacred grove of fig-trees.[2] On two Zakro sealings,[3] apparently impressed by a signet-ring of the same type, a small female figure appears in the air above the sanctuary, while a ministrant on the other side seems to be engaged in some ritual function beside an altar with several horns and a flower-like object.

On a gold ring in the Candia Museum[4] the Goddess, still, apparently, hovering in the air above a clump of lilies, receives the adoration of a female ministrant on her left, while to the right another handmaiden grasps the boughs of the sacred fruit-tree standing within its little enclosure. On a gold signet, apparently from the Vapheio tomb, now in the Ashmolean Museum,[5] the Goddess, distinguished by her rich dress, seems to be bringing down by dancing and incantation a boy-God who holds out a bow and dirk, while, to right, a more plainly attired female kneels beside a jar-like object, using its rim to rest her head on her arm in a mourning attitude. The figured design is in this case above a base with horizontal lines marking the architectonic character of the original.

The descending warrior divinity seen, as on the painted tablet, holding a spear and 8-shaped body-shield, reappears in the field of the well-known signet-ring from Mycenae, where the affinities with painted designs are specially manifest. The Minoan Goddess lily-crowned and holding poppy capsules, as on an analogous gold signet-ring from Thisbé, is seated beneath her sacred tree, from which one of her little twin handmaidens plucks her a branch of fruit. The votary beyond, with the posy of lilies in her left hand, here recalls the figure of a wall-painting from the Minoan Thebes who holds out a similar bunch. The heavens, symbolized by the Sun and Moon, are shut off above by a wavy curve, as if the scene itself lay in some Elysian field.

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[1] G. Rodenwaldt, *Votivpinax aus Mykenai* (*Ath. Mitth.*, xxxvii, 1912, Pl. VIII, from a drawing by Monsieur Gilliéron, père, and p. 129 seqq.). The figure, as Dr. Rodenwaldt points out, is clearly shown to be female by the remaining traces of the white limbs. The tablet is 11·9 cm. high, and 19 cm. broad. The figures are about 10·3 cm. high, only slightly higher than the ladies of the Temple Fresco.

[2] *P. of M.*, i, p. 160, Fig. 115, and cf. A. E., *Myc. Tree and Pillar Cult*, p. 72 seqq., and Fig. 48. In this case the descending figure wields a spear, but there is no body-shield.

[3] D. G. Hogarth, *The Zakro Sealings* (*J. H. S.*, xxii, pp. 1, 2, Fig. 1).

[4] Martin Nilsson, *The Minoan-Mycenaean Religion*, Pl. I, 4 and p. 227.

[5] See *P. of M.*, ii, Pt. II, p. 842, Fig. 557, and cf. Nilsson, *op. cit.*, Pl. I, 3, and p. 296, Fig. 85.

In the case of an important Palace signet at Knossos, of which, besides impressions, a clay replica was actually found,[1] the refreshment is no longer supplied by these Hesperid fruits. To the Goddess, seated in a rocky landscape, drink is offered in a funnel-shaped vessel, resembling a 'rhyton' of that type, while a mystic circle appears above its rim. In slightly variant forms this ministration is repeated on clay impressions of signet-rings found at Zakro[2] and Hagia Triada.[3]

Landscapes with rustic cult compared with Pompeian paintings.

The indications of landscape given on many of these signet designs, the rocks and trees, and even the rustic cult itself so often illustrated, with its little pillar shrines, curiously recall that which meets the eye in the background of many Pompeian wall-paintings. It is an undoubted fact that in country places throughout the Classical world, much of the earlier prehistoric cult such as in the West we associate with dolmens and menhirs had survived in an almost unchanged form. What is specially suggestive in this connexion, however, is that there exists a widespread class of Greco-Roman intaglios which had formed the bezels of finger-rings that stand in direct relation to the rural religious scenes painted on the walls. It may well be that the Minoan examples, including those of a more elaborate character, stood in a similar relation.

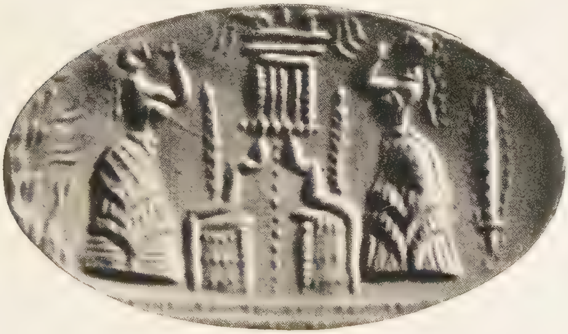

Fig. 89. Intaglio on Signet-ring: Chamber Tomb, Mycenae.

Sacred spring and trees on ring.

Among special types, that reproduced in Fig. 89 may best be interpreted as illustrating the adoration of a sacred spring descending from a height within a walled temenos, and its source sheltered by three trees within a little enclosure.[1] Such a spring, as we now know, existed at Mavro Spelio on the height East of Knossos, in immediate contiguity with a very early series of rock tombs.[2] Its inner channels and artificially cut basin, beneath the rock shelter at its point of emergence, are still visible, and fig-trees, such we may imagine are indicated within the little upper enclosure of the intaglio, still shoot from the rock. But the water itself, the falls of which from the height seem to be indicated on the ring by the central upright line of dots, has long disappeared—another evidence of the desiccating process that has affected the Cretan climate since Minoan days.

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[1] *P. of M.*, ii, Pt. II, pp. 767, 768, and Fig. 498.

[2] *Ibid.* Fig. 500.

[3] *Ibid.*, p. 768, Fig. 499.

Marine subjects on signet-rings.

Another class of these gold signet-rings displays religious scenes of a marine character.[3] On one we see the advent of the Goddess in her barque at some sanctuary on the coast, bearing with her her sacred tree. On another signet-ring, from the Harbour Town of Knossos, her barque is putting off from the site of her pillar-shrine, while above it, waving farewell to votaries on the shore, the Goddess and her sacred tree beside her appear as if floating in the air.[4] The sacred tree itself, generally within a pillared enclosure, is a constantly recurring feature.

Descending God on 'larnax'.

Offertory scenes on H. Triada sarcophagus.

It is an interesting circumstance that—together with the fresco panel from Mycenae—a near parallel in painted design to the descending figure with the body-shield is supplied by a clay sarcophagus or 'larnax' of L. M. III *b* date, from a chamber tomb at Ligortino in the Knossian back-country. On the other hand, of actual fresco painting on a sarcophagus, a unique example is supplied by that of L. M. III *a* date from the Hagia Triada *tholos*.[5] Here, on a scale once more distinctly greater than that of the 'Miniatures', we see scenes of offering and sacrifice in honour both of the Double Axes, with the settled birds as in divine possession,[6] and apparently of the departed himself. It is to be noted, moreover, that in this case the arrangement of the painted designs shows a curious conformity with many of these signet types. The action, in fact, is directed to two separate goals on the right and left extremity respectively, so that there are really two scenes, the background itself being divided into three fields, white, blue, and white—a variation characteristic of larger frescoes on walls of halls and corridors.

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[1] In my *Myc. Tree and Pillar Cult*, pp. 85, 86 (*J. H. S.*, xxi, pp. 182, 183). I had suggested that the line of dots might represent a path descending from a summit sanctuary.

[2] See E. J. Forsdyke, *The Mavro Spelio Cemetery at Knossos* (*B. S. A.*, xxx), p. 243 seqq., and see Plan, p. 249, Fig. 3.

[3] See *P. of M.*, ii, Pt. I, p. 245 seqq.

[4] *Ibid.*, p. 250, Fig. 147, *a*, *b*.

[5] *Ibid.*, i, p. 438 seqq., and Figs. 316, 317 (cf. Paribeni, *Mon. Ant.*, xix, Plates I–III, and pp. 5–86).

[6] See *P. of M.*, i, p. 223.

'Sarcophagal' Art.

This specifically 'sarcophagal' art, as yet only sporadically brought to light, may in the future supply many new parallels to these religious ring subjects.

From the sealings of Zakro and other sources, it is clear that the cult of the Double Axes illustrated thus in sepulchral painting was also taken over into signet-rings.

There have by this time come to light—mostly in a distinctly sepulchral connexion—a whole series of gold signet-rings, such as the above, presenting religious scenes. The bezels of these, with their somewhat elongated oval form, are better designed for containing the elements of such pictorial compositions than the ordinary engraved bead-seals whether of lentoid or amygdaloid type.

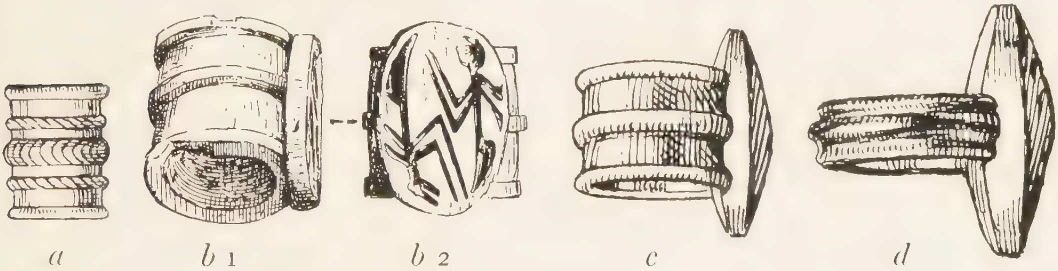

Fig. 90. Evolution of Minoan Signet-ring: *a*, Tubular Gold Bead (M.M. I); *b* 1, 2, Pendant Signet, Ivory; *c*, Ideal Intermediate Type; *d*, Signet-ring of Minoan Type.

Evolution of Minoan Signet-ring.

Origin of Minoan signet-ring from bead-seal.

The history of these Minoan signet-rings is itself of special interest and explains the fact that alone among all known classes of finger rings the bezel is here set at right angles to the hoop. It also accounts for the peculiarity that the hoop is often abnormally small, and was primarily intended for suspension, not for wearing on the finger.

That this type of ring was in fact derived from a tubular bead with a signet-plate set on it longitudinally, may be inferred from a derivative example in ivory, standing in very near relation to an original metal form of this kind found in a M. M. I deposit in the primitive tholos of Platanos. A sketch of this, with a tubular gold bead beside it, is given in Fig. 90, *b*.[1]

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[1] This evolution was first pointed out by me in the *Ring of Nestor, &c.*, p. 43. The ivory example is given in Xanthudides, *Vaulted Tombs of Mesará* (transl. J. P. Droop), Pl. LVII, 472, 473.

Here it is important to observe that the reversed ants that form the intaglio design, represent a Cretan adaptation of the reversed lions on a class of Egyptian 'button-seals' of Sixth to Eleventh Dynasty date, which as already shown, had a well-defined reaction on Cretan sphragistic types, illustrated by the 'double sickle' series.[1] The triple moulding of the original gold beads itself survives in that which generally marks the hoops of signet-rings of this class down to the close of the Minoan Age. The transition is supplied in Fig. 91 by the ideal form shown in Fig. 90, *c*.

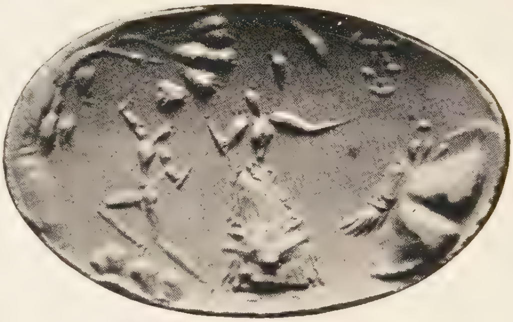

Fig. 91. Gold Signet-ring from Vapheio Tomb with Religious Scene ($\frac{3}{1}$).

Primarily designed for suspension.

The evidence thus afforded of the derivation of the most typical of Minoan types of signet-ring from bead-seals made for suspension, further obviates the necessity of supposing that these rings were specially designed *in usum mortuorum* to be fitted on to the fingers of the skeleton.[2]

Religious Scenes on Signet-rings combining Mourning Ceremony with Ecstatic Dance.

Mourning scenes on signets from Mycenae and Vapheio tombs.

At times, we may discern, within the narrow bezel of the signet, the touch of the true artist and of a fine composition, clearly taken over from the painter's Art. Nowhere is this more perceptible than in the design on a gold ring from a Mycenae tomb (Fig. 93, below), the subject of which has already been referred to on account of its high importance in relation to certain Syrian affinities in Minoan religion.

The Vapheio ring.

The subject here stands in a close relation to that of a gold signet from the Vapheio tomb,[3] Fig. 91, which itself follows on to the group already referred to above, representing an armed divinity brought down by due ritual from the realms above to join his consort or votaries. In more than one case, as on the painted tablet and larnax, and on the great signet from Mycenae, an armed, descending divinity is covered by an 8-shaped body-shield. On this Vapheio ring the divine hero of the scene himself is wanting, but his great body-shield is depicted against the light border of the field on which is visible a small female figure[1] prostrate as if in an entranced attitude.[2] To leave no doubt as to the character of the cult, a small symbol appearing in the field above, must in the light of present knowledge clearly be recognized as a Minoan combination, of which we have other examples, of the Double Axe with the Sacral Knot.[3]

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[1] See my Table, *P. of M.*, i, pp. 123–5, and Fig. 92.

[2] I had myself been led at first to this conclusion owing to the small diameter of the hoops of signet-rings found in the Isopata Cemetery (*Tomb of the Double Axes* (*Arch.*, lxv), pp. 12, 13). The mean diameter of one hoop was 13 mm. One from the Vapheio Tomb is 13 mm., another from the Lower Town of Mycenae is 12 mm. The ordinary hoop ranges from about 17 mm. for a woman to 19 or more for a man.

[3] Tsountas, 'Εφ. 'Αρχ., 1889, Pl. X, 29 and p. 170; Tsountas and Manatt, *Mycenaean Age*, p. 225; Perrot et Chipiez, *L'Art, &c.*, vi, p 847, Fig. 431; Reichel, *Homerische Waffen*, p. 6, Fig. 4; Furtwängler, *Ant. Gemmen*, Pl. II, 19; Fritze, *Strena Helbigiana*, p. 73, Fig. 7.

Dual composition of design.

It seems possible that the subject really divides itself, as in the case of the other Minoan designs, into two successive phases of the same scene. This, as already pointed out with reference to the inlaid designs in the dagger-blades, and more fully below in connexion with the composition on the Vapheio Cups, is itself due to the dependence of these smaller works on painted stucco originals, which were divided into compartments owing to the necessities of the fresco technique.

In that case the central figure on the Vapheio signet, in whom we may with some probability recognize the Goddess who seems to be whirling round, with flying locks of hair, in an orgiastic dance, may be one and the same with the female personage shown on a smaller scale, *ex hypothesi* belonging to another scene of this religious act, and who there lies prone on the great body-shield. Above the dancing figure appears a spray and an object to which a high interest attaches. This object, of which an enlargement to about ten diameters is given in Fig. 92, suggests the wingless body of an insect with two prominent eyes, and its resemblance to a chrysalis, such as the gold specimen from a Mycenae grave illustrated below,[4] is unmistakable. Appearing as it does in the field above the head of the Goddess, it supplies a remarkable parallel to the chrysalises—there associated with

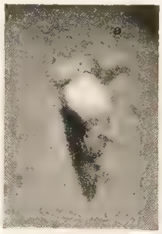

Fig. 92. Chrysalis Emblem of Vaphio Ring ($\frac{10}{1}$).

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[1] Tsountas in his original account described the prostrate figure and shield together as 'an object resembling an insect of disproportionate size' ('Εφ. 'Αρχ., 1890, p. 180). Mayer (*Jahrb. of Arch. Inst.*, 1892, p. 189) recognized the shield but took the figure for a crested helmet, and Furtwängler accepted this view. In my *Myc. Tree and Pillar Cult*, p. 81 (*J. H. S.*, 1901, p. 179) what I believe to be the true explanation was supplied.

[2] On the shield as a medium of possession. See below, p. 314 seqq.

[3] See *P. of M.*, i, p. 431 seqq., and Fig. 310. In *Myc. Tree and Pillar Cult*, pp. 80, 81 [178, 179], being still unaware of the part played by the 'Sacral Knot' in Minoan symbolism, I had compared the arms and legs seen on Egyptian and Hittite versions of the 'Ankh' (see *op. cit.*, Fig. 54).

[4] See below, p. 151, Fig. 102.

butterflies—seen in a similar relation on the 'Ring of Nestor',[1] which there, however, have a definite specific form. On the Vapheio ring, too, we have every warrant to regard the chrysalis as an emblem of resurgence.

On the left of the Goddess a male attendant plucks a fruit from the sacred tree, rising up from behind what seems to be a baetylic stone of subconical form.

Ecstatic effect of fruit of sacred tree.

This action, which recalls that on the great Mycenae signet and elsewhere, and is again depicted in the companion scene displayed on the companion signet (Fig. 93), is of special ritual moment. It is the juice of the sacred fruit, like the *Soma* of the Vedas, that supplies the religious frenzy, and at the same time implies a communion with the divinity inherent in the tree.

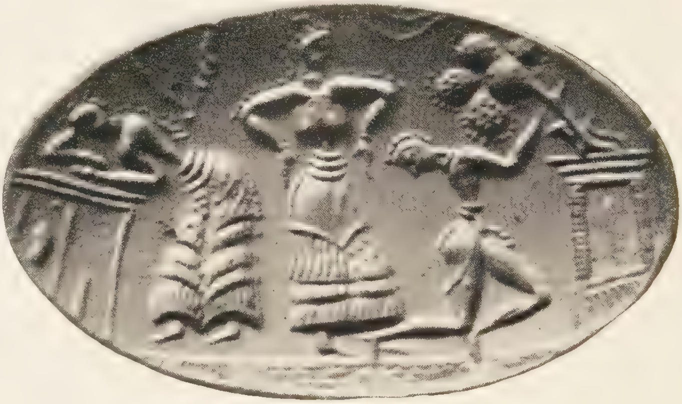

FIG. 93. RELIGIOUS SCENE OF MOURNING BY GRAVE AND ECSTATIC DANCE ON GOLD SIGNET FROM MYCENAE ($\frac{3}{1}$).

Funereal significance of body-shield.

Thus, according to the reading of the evidence, there are two successive scenes in this representation. In the first the Goddess is thrown into an ecstatic frenzy by the juice of the sacred fruit. In the second she falls entranced on the shield of her male consort. Like the early gravestones at Falerii, for instance, in the form of the Italian oval shields, the shield itself as thus set on one side with the mourning figure resting upon it, surely indicates the death of its owner.[2] We are brought, in fact, into a religious domain, of which Crete and Syria alike formed part, where a mortal but resurgent God forms a principal figure.

Parallel design on Mycenae ring.

A close analogy to the representation on this Vapheio signet is afforded by that from a tomb at Mycenae shown in Fig. 93,[3] to which attention has been already called on account of the artistic feeling that it displays.

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[1] See below, p. 148, Fig. 96.

[2] We may recall the slain figure covered with the body-shield on the Mycenae stela.

[3] I first described these rings in *Myc. Tree and Pillar Cult*, p. 78 [176] seqq., and, after thirty years of fresh discoveries, still adhere to the general lines of the interpretation there given. It is possible, however, in going over the ground again to modify some details and to supply new comparisons. The idea of the 'duality' of the types also makes matters clearer.

Similar ritual and refreshment of Goddess.

Here, too, the scene—the arrangement of which is reversed—divides itself into two separate episodes. The first of these on the right shows an almost exact conformity with that which occupies the centre and left of the field in the other case. A male attendant is pulling down a branch of the sacred fruit-tree which in this case stands in its little enclosure with a pillar within it. The Goddess, beyond, in an attitude that according to primitive analogy may represent hunger,[1] seems to be here waiting for the fruit that shall inspire her ecstatic trances—or, indeed, she may actually have partaken of the sacramental refreshment and be in the act of starting off in an orgiastic dance similar to that of the companion figure. Two curving lines indicate the boundary of high heaven above and a leafy spray is seen to the left.

Separate scene of mourning at grave hung with little shield.

The remaining part of the field to the left is occupied by a separate scene, curiously parallel with that on the Vapheio ring but divergent in detail. Here the female figure, repeating, in this view, the Goddess on the right, leans forward over the balustrade of a little enclosure resembling the pillar shrine on the opposite side of the field, in an attitude suggestive of deep mourning. The enclosure itself is divided into two compartments, in the first of which—hung, as was usual in shrines, with beaded festoons—appears below a short stone pillar. In the second compartment is a miniature but clearly defined Minoan shield of the same class as that on which the prostrate figure is seen on the Vapheio signet. May we not here trace a variant form of the same religious idea, in which, however, the departed God—a Minoan Adonis—was of more tender years? Already we have seen the Goddess associated not so much with an adult warrior divinity, as with an armed boy-God. An ivory figurine, to be described below, shows him wearing a tiara similar to that of the 'Boston Goddess', and, on a Late Minoan ring-type, the child stands on his mother's lap, in a scene that curiously anticipated the Adoration of the Magi.[2] In the little pillar within the enclosure of Fig. 93 we must certainly recognize the tombstone of the child-God.[3] This, indeed, brings us near to Knossos, where the traditional tomb of the Cretan Zeus was pointed out, down to late Byzantine times, on the peak of Juktas.[4]

Association of Goddess with boy-God.

Religious scenes nearer to the Christian

In these and kindred compositions we seem to stand in a more intimate connexion with the later World than with the intervening Classical Age. The Religion itself stands closer to that which, from the days of Constantine than to the Classical spirit.

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[1] See *Myc. Tree and Pillar Cult*, p. 79 [177], n. 2.

[2] See below, p. 471, Fig. 328. It was recently acquired by me from a tomb at Thisbê.

[3] *P. of M.*, ii, Pt. I, p. 278.

[4] See *P. of M.*, i, p. 153.

onwards, has kept its hold on a large part of the Mediterranean World[1] while gaining still vaster regions beyond the South Atlantic. The pathos that breathes in the mourning figure over the little grave compares rather with an Italian *pietà* or entombment. Here at least we are far from the snows of Olympus, and, indeed, even to find subjects of the sentimental class to which the above belongs, Greco-Roman Art was itself forced to stray into the Anatolian and Syrian religious domains of which Crete in the most primitive stage was itself a province, and to illustrate the tragic tales of Attis or Adonis.

Syrian and Anatolian affiliation.

Signet-rings made for use in this world and next.

It is not for a moment contended that this picturesque religious class of gold signet-rings was specially made for sepulchral purposes. They often consist of solid gold, of quite different fabric from the flimsy jewellery with which the ghosts of the departed were often cheated. Their actual use, moreover, as seals for business purposes by the living, is proved by the numerous clay sealings found presenting their impressions.

Ensured protection by divinity.

From the recurring discovery, however, of signet-rings of these religious types with the remains of the dead, it must still be inferred that they were considered a *peculium* of their owner that was to continue in his possession in the World beyond. Certain simple subjects engraved on their bezels, like Griffins or Sphinxes, doubtless brought with them a protective virtue. The more elaborate compositions, such as those depicting the advent or descent of deities, may have conveyed a sense of divine companionship which did not cease with death. The sepulchral scenes themselves—the mourning figures notwithstanding—were full of hope, since the affinities of the old Cretan religion lead to the conclusion that they concerned a youthful God, mortal indeed, but still resurgent. It is possible even that, like the memorial rings of our great-grandfathers,—on which, for instance, a weeping Genius may be seen looking down on a funeral urn,—subjects like the mourning scenes above illustrated may have conveyed, under a religious aspect, a reference to a personal bereavement.

In this connexion we may recall the fact—so signally illustrated by the remarkable evidence derived from the Tomb of the Double Axes—that the grave itself could be regarded by the Minoans as a place of worship, furnished with its baetylic pillar and sacred Double Axes, and fully equipped with the utensils of cult.[2]

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[1] See my remarks on the Christian analogies of Minoan religion in Vol. ii, Pt. I, p. 277 seqq.

[2] A. E., *The Tomb of the Double Axes, &c.* (Quaritch, 1914, and *Archaeologia*, vol. lxv). Cf. *P. of M.*, ii, Pt. I, p. 279.

The 'Ring of Nestor'.

The 'Ring of Nestor'.

But the most suggestive of all these pictorial examples is that supplied by the 'Ring of Nestor'[1] (Fig. 94), already referred to in connexion with the 'sacral ivy' spray, and as illustrating the two little handmaidens of the Goddess. The ring itself, as I have ventured to interpret it, affords the solitary glimpse that we possess of the Minoan Underworld, and of the admission of the departed into the realms of bliss. The multiplicity of figures, human or divine—fourteen in number, in addition to the animal forms—is unique among ancient intaglios, and, considering the size of the field, required microscopic work. It may be compared, even in the exact number of its figures, with the vintage scene and Bacchanalian throng engraved on the cornelian bezel of the signet-ring said traditionally to have belonged to Michelangelo, and,—as the rebus of a fisher-boy below shows,—certainly a *tour de force* of his friend G. M. da Pescia,[2] the celebrated gem-engraver of Leo X's time.

Circumstances of its finding and recovery.

The ring itself is so remarkable that it deserves a special consideration here. It was found in a large beehive tomb at 'Nestor's Pylos' by a peasant in quest of building material there, somewhat previous to the investigation of its remains by the German explorers in 1907.[3] The discovery, however, was kept dark, and on the death of the original finder the ring passed into the possession of the owner of a neighbouring vineyard. Thanks to the kindness of a friend, I saw an imperfect impression of the signet at Athens which gave me, however, sufficient idea of the importance that it might possess. I at once, therefore, undertook a journey to the West Coast of the Morea, resulting in the acquisition of this remarkable object, which, from the popular name given to the *tholos* since Dr. Doerpfeld's investigations,[4] is conveniently described as the 'Ring of Nestor' (Fig. 95). It is of solid gold, weighing 31·5 grammes, and the shape and the narrow diameter of the hoop[1]—too small for the finger—place it among the early class of Minoan signets that were really meant for suspension and directly derived, as shown above (Fig. 90), from a type of Early Minoan bead-seal.

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[1] See especially A. E., *Ring of Nestor, &c.*, *J. H. S.*, xlv, 1925, and, separately, Macmillans, 1925. For an illustration of the design on the ring see, too, *P. of M.*, ii, Pt. II, p. 482, Fig. 289.

[2] Once in the Cabinet du Roi and still in the Paris Collection. It was first described by P. A. Rascas de Bagarris in his tract entitled *La nécessité de l'usage des médailles dans les Monnaies* (1608–11), p. 9. For the history and description see M. Chabouillet, *Cat. Gén. des Camées et pierres gravées de la bibliothèque impériale*, pp. 320–3, no. 2337. An engraving from an enlarged drawing by Madame le Hay, enhancing the pictorial character of the design in the spirit of the time, is given by Montfaucon, *Antiquité expliquée*, vol. i (1719), Pl. 143, 1.

[3] Kurt Müller, *Ath. Mitth.*, xxxii, Suppl., pp. xi–xiv, and *ibid.*, xxxiv (1909), p. 269 seqq.

[4] Dr. Dörpfeld identified Kakovatos, where the *tholos* was found, with Nestor's Pylos, *Ath. Mitth.*, xxxii (1907), Supplement, p. vi seqq. Strabo, viii, c. 3, 7—citing the Ὁμηρικώτεροι—had placed it within the Triphylian borders, as against the claims of the Messenian Pylos.

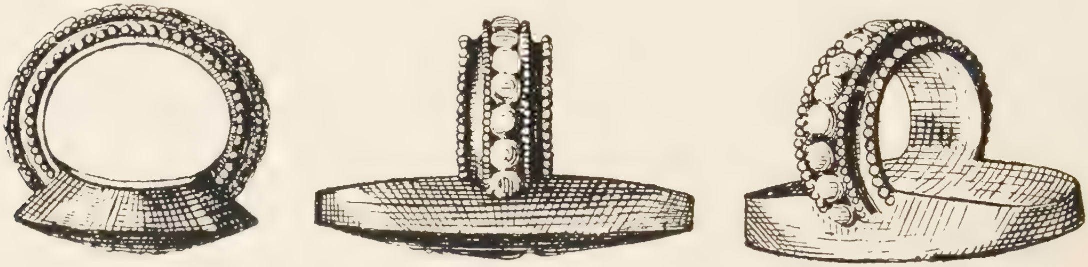

Fig. 94. The 'Ring of Nestor'. $(\frac{3}{2})$

Chronological indications: L. M. I *a*.

For the chronological place of the 'Ring of Nestor' certain clues are supplied both by its association and by features in the design. The parallelism observable with the style of the Miniature Frescoes, including the lively gestures, points to an approximation in date. So, too, the short skirts of the female figures reflect a fashion general in M. M. III and the transitional epoch that marks its close. The bulk of the painted pottery found in the tomb itself was of L. M. I *b* class, and it included some of the finest existing specimens. But one or two vases, notably a characteristic 'pithos', go back to the L. M. I *a* phase, and seem to mark the date of the original interment. There is, indeed, every probability that the ring belonged to that epoch, and may therefore date from the second half of the Sixteenth Century B.C.

The field of the design is divided into zones and compartments,—suggestive of those that characterize many of the frescoes—by the trunk and horizontally spreading boughs of a great tree, about which something has already been said in connexion with the leafy shoot that springs from it above to the right, clearly recognizable as the 'sacral ivy'[2] (Fig. 95).

Arrangement in compartments

But the tree before us itself is old, gnarled, and leafless. It stands with spreading roots on the top of a mound or hillock with its trunk rising and zones by trunk and branches of 'Tree of the World'.

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[1] Though of greater breadth—17 mm.—it is only 12 mm. from its arch to the back of the bezel. The lowness of the arch is not due to any distortion, but the mean diameter (14·5 mm.) would itself be too small either for a woman or a man since these may be said to require hoops ranging from 17 to 19 mm. This massive signet-ring was in any case not intended for a child.

[2] *P. of M.*, ii, Pt. II, pp. 482, 483. The cordiform shape of the leaves and the terminal spray are unmistakable, small as is the scale on which they appear in the intaglio.

in the centre of the field and with wide-stretched horizontal boughs. The result of this more or less symmetrical arrangement is thus to divide the field into four spaces—the effect at first sight resembling that of the four rivers of Paradise or the triple-branched water-course of the Fields of Ialû in the Egyptian 'Islands of the Blest'.[1] In this case, however, the rough trunk and branches, convexly rendered, are unmistakable.

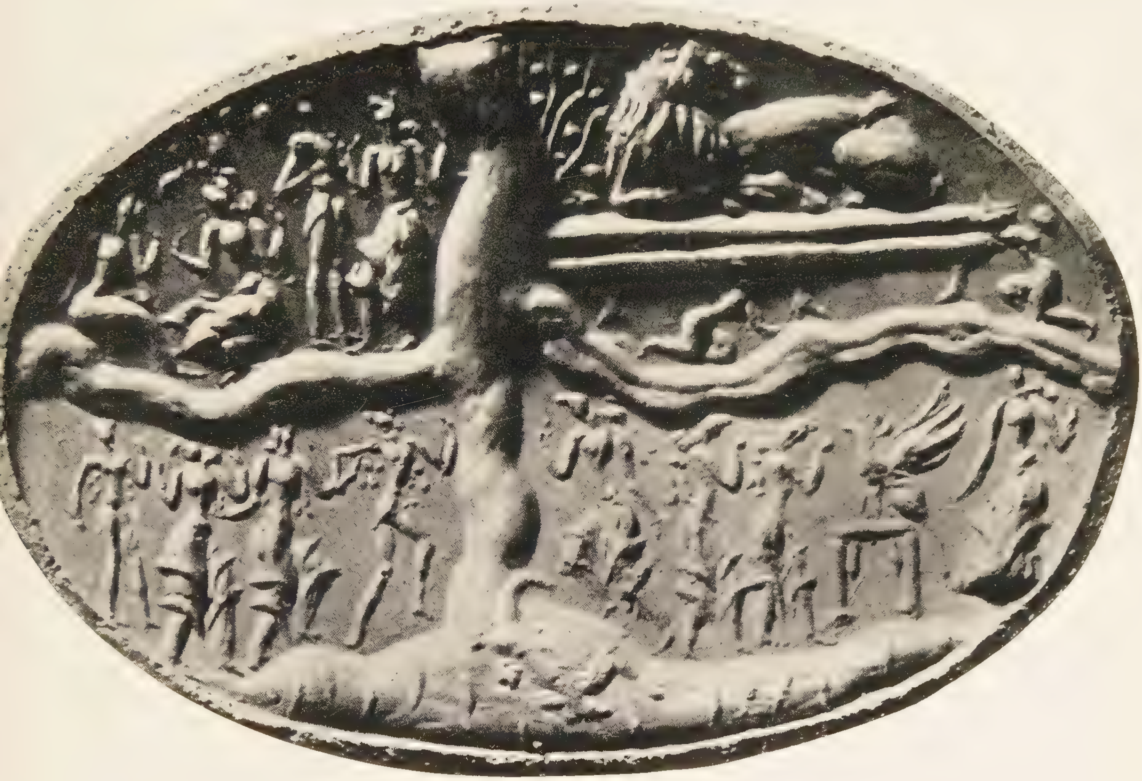

FIG. 95. THE 'RING OF NESTOR', SHOWING BEZEL, ENLARGED 5 DIAMETERS.

The tree, nevertheless, served a purpose analogous to that of the rivers in delimiting into four spaces a field in which we may also recognize a parallel to the Earthly Paradise. The scenes that its branches thus divide belong in fact, not to the terrestrial sphere, but to the Minoan After-World.

Comparison with Yggdrasil.

An obvious analogy is suggested with Yggdrasil,[2] the Ash of Odin's steed and the old Scandinavian 'Tree of the World'. The branches of this greatest of all trees stretch over the whole world and shoot upwards to the sky. One of its three roots reaches to the divine Aesir, another to the land of the Giants, the third to the Underworld (*Hella*). Certain elements in this

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[1] See *Ring of Nestor, &c.*, pp. 49, 50.

[2] *Ibid.*, p. 51.

Northern myth—as Grimm long since pointed out[1]—reappear in an Arab fable of which early translations, Hebrew, Greek, and Latin, are known. The Oriental version reacted in turn on the Medieval 'Tree of Paradise', of which, as already noted,[2] an account is preserved by the Cretan writer, Georgios Chumnos of Candia. This Byzantine 'Tree of Paradise' was also old and bare, and spiders' webs hung from its branches.

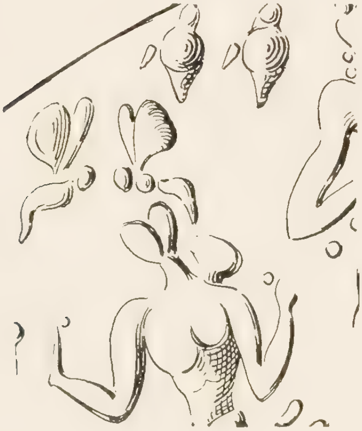

Fig. 96. Butterflies and Chrysalises (side view), above Goddess, on 'Ring of Nestor'.

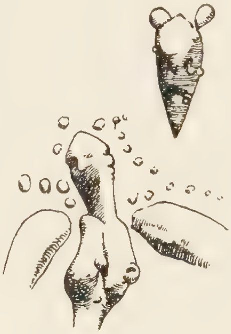

Fig. 97. Chrysalis (facing) above Goddess, Vapheio Ring.

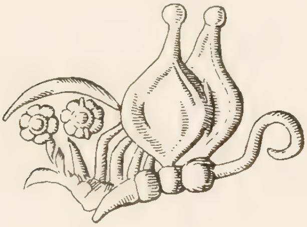

Fig. 98. Butterfly and Flowering Spray: Gem, Knossos.

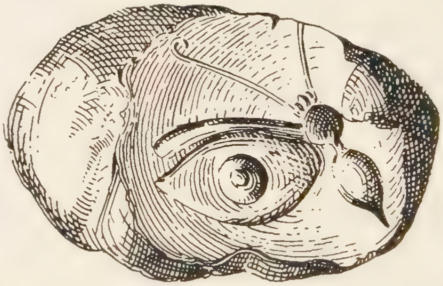

Fig. 99. Butterfly: Clay Sealing, H. Triada.

'Tree of Paradise'.

Sacred trees are themselves a central feature in primitive Religion[3] throughout the world, but it is possible, in view of the existence of early Oriental traditions of the 'Tree of Paradise', that the representation on the ring may have some direct, if very remote, connexion with it.

Interpretation of design.

In the first compartment of the tree may be recognized the Minoan Goddess seated in animated conversation with her wonted companion, while above her head there flutter two butterflies.[4] The symbolic significance of

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[1] *Deutsche Mythologie*, ii, pp. 666, 667.

[2] *P. of M.*, ii, Pt. II, p. 483.

[3] For their special connexion with Minoan religion I may refer to my *Mycenaean Tree and Pillar Cult* (Macmillans, 1901, and *J. H. S.*), *passim*.

[4] Only unacquaintance with this generalized Minoan version could have led the Swedish

Butterflies and chrysalises symbolical of resurgence.

these, moreover, is emphasized by the appearance above them of two small objects showing traces of heads at tip and with hook-like projections at the side, in which we may reasonably recognize the two corresponding chrysalises. A reproduction of these, enlarged 10 diameters, is given in Fig. 96. Professor Poulton, indeed, the eminent entomologist, when consulted on the matter, not only expressed the opinion that we have here beyond all doubt to deal with chrysalises, but that the 'tags' visible at the side answered to that of the 'commonest of all pupae—the Common White'[1]. The conclusion that the objects thus shown are indeed chrysalises is strikingly confirmed by the parallel representation that it has now been possible to adduce from a much enlarged reproduction of a Vapheio signet where a chrysalis—facing in this case with both eyes visible—appears in a similar manner above the right shoulder of the Goddess (see Fig. 97 and Fig. 91, p. 140, above). It will be seen that the shield-shaped thorax corresponds with that of the more naturalistic gold chrysalis (Fig. 102) from a chamber tomb at Mycenae.[2]

The butterflies are of the typical Minoan kind as seen in profile with the head, thorax, and abdomen clearly defined, and the abdomen as usual curving downwards and of somewhat disproportionate length. They resemble, for instance, one of a purely naturalistic group on a haematite lentoid in my possession, found near Knossos (Fig. 98). On a clay sealing

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entomologist, Dr. S. Bengtsson (while admitting that 'the insects certainly resemble butterflies'), to express the opinion that 'the intermediate part, resembling a small orb visible between the head and the back part of its body', seen in the case of the insect to the right, shows 'that it cannot be a butterfly, but must be a hymenopter' (Martin Nilsson, *The Minoan-Mycenaean Religion, &c.*, p. 552). But a butterfly has a thorax as much as a hymenopter. The chrysalises he regarded as 'a kind of shell' on account of the tags explained by Professor Poulton and the concentric circles visible on the bodies. This theory entirely dissociates the two pairs of objects, which on the ring are placed in an obvious relation. The conjunction of a butterfly with a chrysalis is natural; but what connexion has a wasp, let us say, with a periwinkle? The insects themselves show detailed correspondences with other Minoan versions of butterflies (cf. Figs. 98, 99), and there is absolutely no warrant for the remark (*op. cit.*, p. 552) that the artist 'has depicted one of them in such a way that it certainly cannot be a butterfly'. No real distinction can be established between the pair, and Professor Poulton could only express his astonishment at the character of the above self-contradictory criticisms.

[1] See, too, Poulton, *Proc. Ent. Soc. Lond.*, 1924, lxxix seqq. Professor D'Arcy Thompson in his remarks on the passages where Aristotle (*Hist. An.*, v. 19) describes the whole development of a butterfly from a caterpillar, shows that he had in mind the Common White or 'Cabbage' butterfly (*The Works of Aristotle*, vol. iv, p. 551, A). The cabbage (ῥάφανος or κράμβη) is mentioned by Aristotle (*loc. cit.*) as the food-plant of the caterpillar.

[2] See *Ring of Nestor, &c.*, p. 55, Fig. 47.

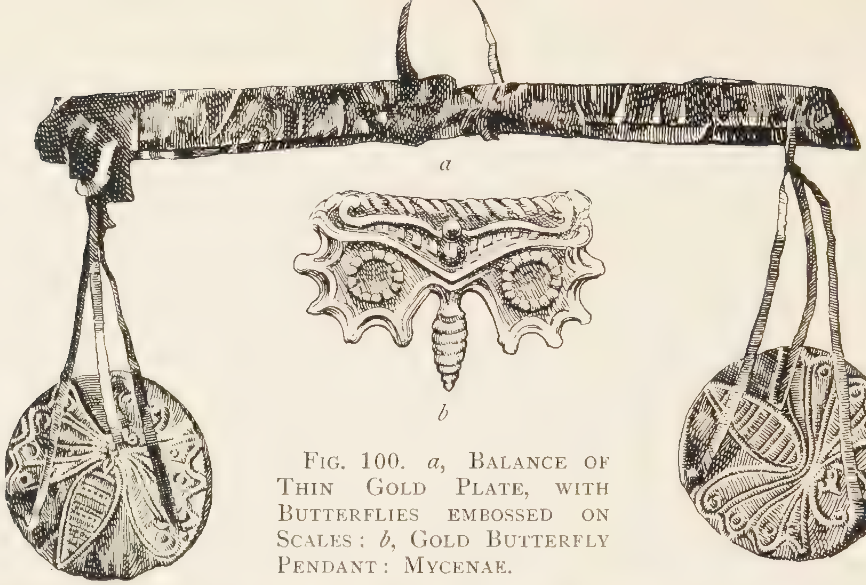

FIG. 100. *a*, BALANCE OF THIN GOLD PLATE, WITH BUTTERFLIES EMBOSSED ON SCALES: *b*, GOLD BUTTERFLY PENDANT: MYCENAE.

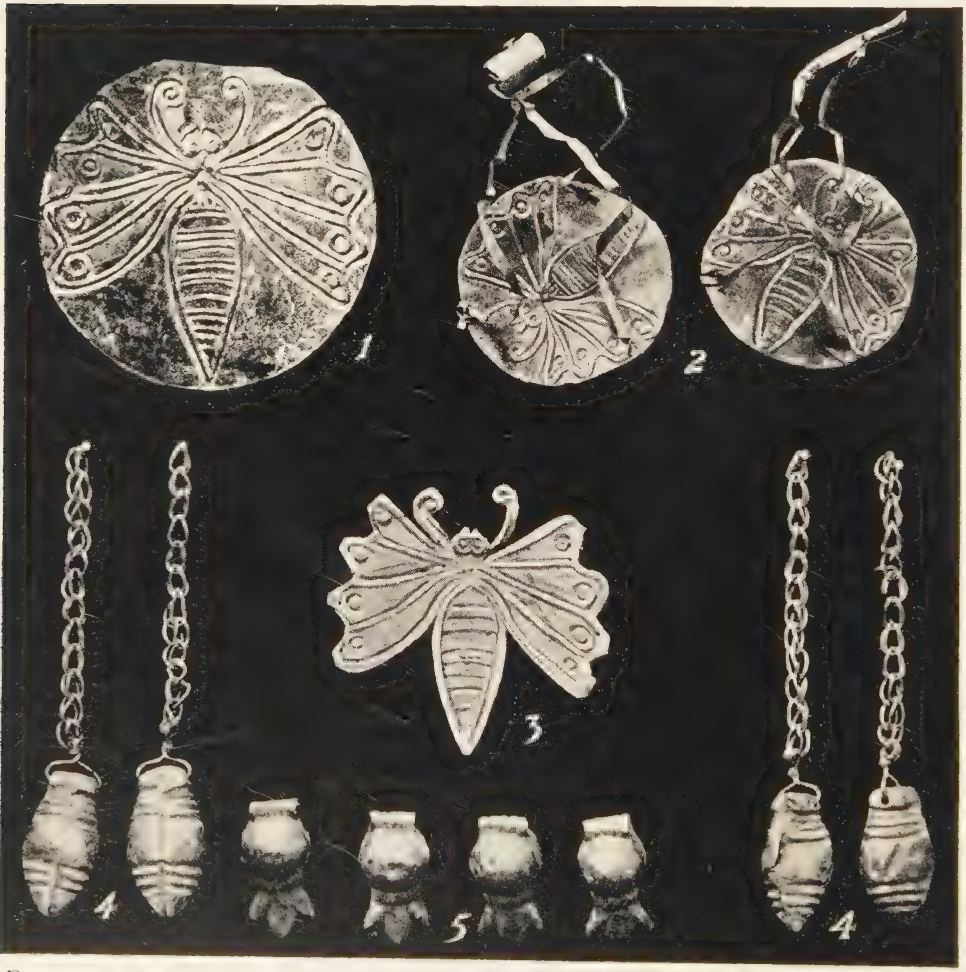

FIG. 101. GOLD SCALES, BUTTERFLIES, AND CHRYSALISES FROM THIRD SHAFT GRAVE, MYCENAE.

from Hagia Triada (Fig. 99) certain features of an eyed butterfly are rendered in greater detail.

The chrysalis as an emblem of a new life after death is illustrated by two finds made at Mycenae. In the Third Shaft Grave—a woman's tomb were found two pendent gold objects attached by means of a perforation through the upper ends to small chains, described by Dr. Schliemann as 'grasshoppers' or 'tree-crickets' (Fig. 101, 4), but which are unquestionably intended for chrysalises. They were, in fact, associated in the same tomb not only with golden butterflies (Fig. 101, 3, and Fig. 100, *b*), but with thin gold plates embossed with similar butterflies and provided with attachments, showing that they had served as the scales of a balance of the same thin, funereal material (Fig. 101, 2). Remains of the tubular casing of the wooden beam were also found, making it possible to reconstruct the ,whole, as shown in Fig. 100.[1] Here we have an obvious allusion to the weighing of souls, suggesting an analogy with the Egyptian idea of Thoth and Anubis weighing the heart of the dead man against the feather of Truth—a purely ethical idea as compared with the Greek *ψυχοστασία*, which relates to the doom of the living.[2]

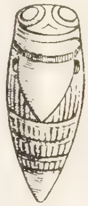

FIG. 102. GOLD CHRYSALIS FROM CHAMBER TOMB, MYCENAE.

The very rough representations of pupae, seen in Fig. 101, 4, have now been supplemented by a much more detailed example in the form of a gold chrysalis bead found by Mr. Wace and the excavators of the British School in a chamber tomb at Mycenae[3] (Fig. 102). It may be said to convey a generalized idea of a chrysalis. The head and eyes, the wing-cases and articulation of the abdomen are clearly indicated. As noted above, the shield-shaped plate in front links this with the ruder representation seen in Fig. 97.

Butterflies—as already observed—are still regarded by the Cretan peasants—as by so many primitive folk the world over—as 'little Souls'.[4]

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[1] From the Figure as restored by Dr. G. Karo in Fimmen, *Kretisch-Mykenische Kultur* (1921), p. 124, Fig. 116. Cf. Schliemann, *Mycenae*, p. 197, Fig. 303.

[2] See my remarks, *Ring of Nestor, &c.*, p. 60.

[3] In Tomb 518 of the Kalkani Cemetery (see A. J. Wace, *The Times Lit. Supplement*, Oct. 26, 1922, p. 684). A preliminary publication of this bead was made in the *Illustrated London News*, Feb. 24, 1923, p. 300. Cf. *Ring of Nestor*, p. 55, Fig. 47.

[4] Some good instances are given by Prof. Poulton, *op. cit.*, pp. lxxxi, lxxxii. Dr. Thomas Hardy, in reference to an incident in the 'Superstitious Man's Story' in *Life's Little Ironies*, informed him that a common white moth is called the 'Miller's Soul' because it flies out of a man's mouth at the moment of death. Sir James Frazer in the *Golden Bough* (vol. i (1890), p. 130) notices the Burmese belief that when a mother dies leaving a young baby, 'the butterfly or soul of the baby follows that of the mother, and that if it is not recovered the child must die. So a "wise woman" is called to get back the baby soul.'

Placed as they are here in connexion with their pupal forms, it is difficult to explain them otherwise than as an allusion to the resurgence of the human spirit after death. It can hardly be doubted, moreover, that they apply to the two youthful figures who appear beside them on the ring, and must be taken to be symbolic of their reanimation with new life.

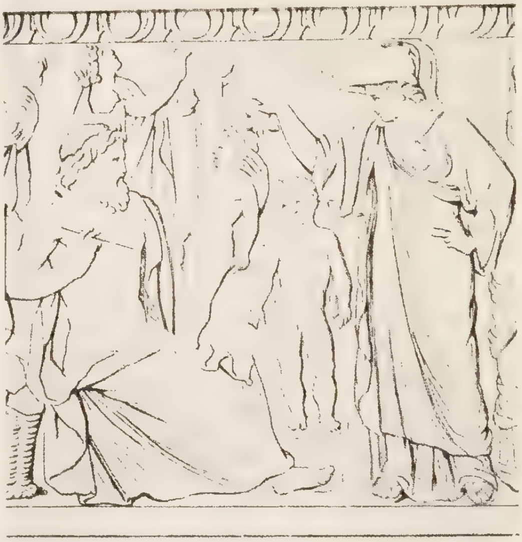

Fig. 103. Athena infusing Life into Clay Figure moulded by Prometheus on Sarcophagus in Capitoline Museum.

Young couple reunited in Death.

The youth, with long Minoan locks, standing behind the Goddess, raises the lower part of his right arm, while the short-skirted damsel who faces him with her back to the trunk, shows her surprise at the meeting by holding up both hands.[1] Here it will be noticed that the gesture language is altogether in keeping with that of the lady spectators shown in the 'Miniature Frescoes'. Taken in connexion with the emblems of resurgence, the natural significance of the scene strikes the eye.[2] We see here, reunited by the life-giving power of the Goddess and symbolized by the chrysalises and butterflies, a young couple whom Death had parted. The meeting indeed may, in view of the scene of initiation depicted below, be rather interpreted as the permanent reunion of a wedded pair in the Land of the Blest than an attempt like that of Orpheus to rescue his Eurydice from the Shades, or than the all too brief respite granted to Protesilaos.[3] But the dramatic moment itself largely corresponds, and the spouse on the ring might well exclaim with Wordsworth's Laodamia:

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[1] This gesture seems to be a universal primitive sign of surprise. As such, it is figured among the Neapolitan gestures in A. de Jorio, *Mimica degli Antichi, &c.*, p. 333, and Pl. 5, where a girl stands in precisely the same attitude.

[2] Dr. Martin Nilsson, indeed (*The Minoan-Mycenaean Religion*, p. 553), finds it difficult to accept this symbolic value of the butterflies and chrysalises so early as the Minoan Age. But the symbolic side of Minoan religion was well marked. The Double Axe appears as an indication of the chief divinity, the sacred 'eye' and 'ear' in the background of ceremonial scenes on signets imply an all-seeing and all-hearing presence. Settled doves are emblematic of spiritual possession. The sepulchral cell of the 'Tomb of the Double Axes', actually cut out in the shape of the sacred weapon, supplies an example of religious symbolism which may be strictly compared with the cruciform shape of many Christian Churches.

[3] Cf. *The Ring of Nestor*, pp. 64, 65.

> ‘No spectre greets me,—no vain shadow this;
> Come, blooming hero, place thee by my side!
> Give, on this well-known couch, one nuptial kiss
> To me this day a second time thy bride!’

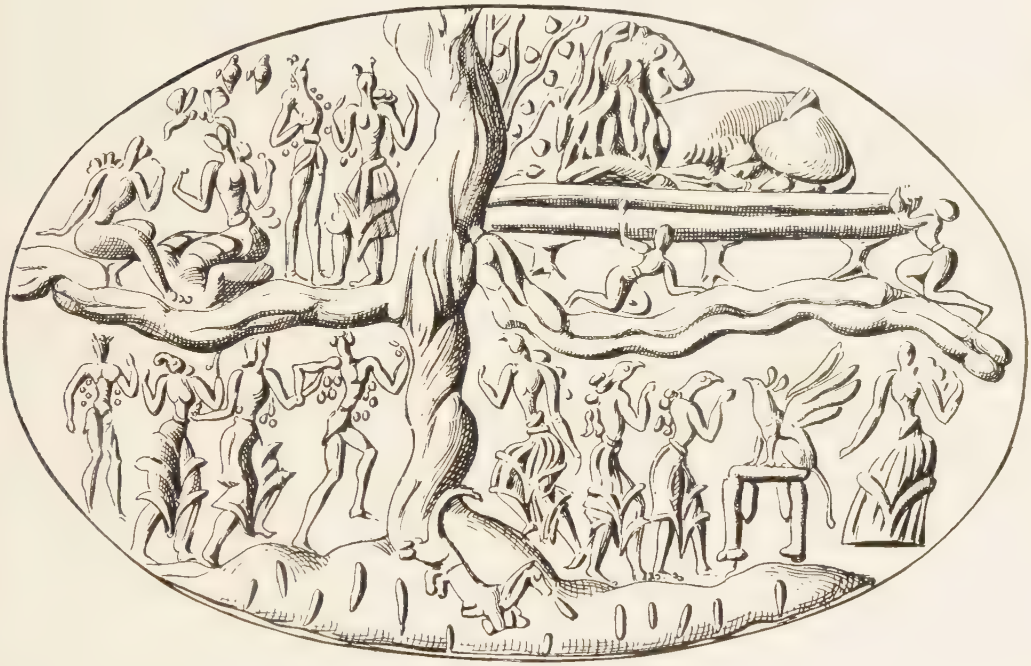

FIG. 104. THE ‘RING OF NESTOR’: DESIGN ENLARGED 4 DIAMETERS. BY E. GILLIÉRON, FILS.

Chthonic aspect of Minoan goddess.

Of the specially chthonic aspect of the Minoan Goddess, in which she appears as guardian of the abode of the dead, we have ample evidence. In the case of the ‘Tomb of the Double Axes’ at Knossos the chamber was also a shrine, the furniture of which, including the ritual Double Axes of the divinity between the Sacral Horns, was placed on a ledge at the head of the sepulchral cell, which itself was hewn out of the rock in the symbolic form of the sacred weapon.[1] On the other hand, gold butterflies of funereal fabric have in more than one case been found associated with the dead, while the gold balance of the same light character, found with such in the Third Shaft Grave at Mycenae, and showing butterflies embossed on their scales, point to the idea of the weighing of souls. That in Minoan, as in later times, the

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[1] A. E., *Tomb of the Double Axes, &c.* (*Arch.*, lxv, and Quaritch, 1915), p. 33 seqq.

Her life-giving power.

butterfly—ψυχή—was regarded as the 'life' of man is clear, and of such, used as an agency of reanimation by the Goddess, a curious parallel of Classical date is supplied by a scene on a Greco-Roman sarcophagus in the Capitoline Museum, here reproduced in Fig. 103, where Prometheus holds the inert clay figure that he has moulded in the form of a child towards Athena, who infuses it with life by setting a butterfly on its head.

Lion guardian of Underworld.

In the next compartment, right of the trunk, the sacred Lion of the Goddess is seen in an attitude of vigilant repose on a kind of bench, tended by two girl figures (though in women's dress) in whom we recognize the frequently recurring representations of her two little handmaidens.[1] The lion of the Goddess would naturally keep watch and ward over the realms below, just as in Egyptian belief the Underworld region through which the sun passed between nightfall and dawn was guarded at either gate by the lions 'Yesterday' and 'To-day'. The religious character of the scene is further enhanced by the bough, identified above with the 'sacral ivy' that springs from the trunk.

Initiatory examination by Griffin as Chief Inquisitor.

The lower zone on either side of the trunk, beneath the spreading branches, unfolds one continuous scene, the whole of which seems to depict the initiatory examination of those entering the Halls of the Just in the Griffin's Court. In the left compartment the young couple reappear, treading, as it were, the measure of a dance and beckoned forward by a 'griffin lady'—a fantastic creation also found on a Cretan intaglio[2]—right of the trunk, while another warns off a youth on the extreme left, as a profane intruder. Right of the trunk, beyond the first, two more 'griffin ladies'—dressed in the usual short-skirted fashion of the early part of the New Era with hands upraised in adoration—head the procession to the presiding figure of the tribunal. This is a winged griffin of the milder, peacock-plumed variety, seated on a high stool or throne, while behind stands another female personage, in whom we may recognize a repetition of the Goddess herself. A pre-eminent characteristic of the griffin—eagle-headed in his origin on Cretan soil—is his piercing sight, which qualifies him here for his post as Chief Inquisitor. Below, on the mound at the foot of the Tree, amidst shoots that seem to stand for herbage, is couched a dog-like monster, the forerunner of Cerberus, but who may also be compared in a broader aspect with the dragon—the loathly Nidhöggr—at the foot of Yggdrasil.

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[1] See *P. of M.*, ii, Pt. I, pp. 340–2 and Fig. 194.

[2] On a steatite bead-seal from Central Crete in the late Mr. R. B. Seager's possession (now in the Metropolitan Museum, New York). The eagle-headed female type is of more usual occurrence on Cretan intaglios, and is repeated on some of the Zakro sealings (see *Ring of Nestor*, &c., p. 69, notes, 81, and 82).

First insight into Minoan eschatology.

The entire composition of the designs on this remarkable signet-ring moves forward in a single story.[1] This, as has been shown, is divided into four successive episodes—the Goddess seated in front of her companion and with the tokens of her life-giving powers, the butterflies and chrysalises above her head; next, the reunited couple; then the lion-guardian, tended by the handmaidens of the divinity, and finally 'the Griffin's Court', representing a ceremony of initiation. It gives us our first real insight into the pre-Hellenic eschatology, and is the only glimpse that we possess of the World Beyond as conceived by the Minoans.

A true Elysion: not Hades.

There is no gloom about the picture; the human figures are not mere shadows or half-skeletons, but real flesh and blood and moved by very human emotions. Surprise, joy, affection, and encouragement are alternately suggested, and we see the advancing pair caught, as it were, with the spirit of the dance, as if unseen music filled the background. The Goddess and her handmaidens and the ministering griffin-ladies show the same vivacity of gesture language, with truly dramatic touches in the action displayed. All alike wear fashionable raiment, reflecting indeed the latest *modes*, and the imagination is left free to fill in the bright colouring. We have not here the Hades of primitive Greek tradition—the gloomy Under-World of pale shadows and gibbering ghosts. This is the true Elysion, un-Hellenic in its conception, and ruled by the Cretan Rhadamanthys,[2] brother of Minos, such as was the promised land held out by Proteus to Menelaos in the well-known passage of the *Odyssey*. It is not in Argos that he shall meet his fate; the deathless gods shall convey him 'to the Elysian Plain and the World's End, where is Rhadamanthys of the fair hair,[3] where life is easiest for men. No snow is there nor yet great storms nor any rain; but always Ocean sendeth forth the breeze of the shrill West.' Here, too, he shall rejoin his spouse—a significant point of comparison with the scene on the ring—'Yea, for thou hast Helen to wife, and thereby they deem thee to be son of Zeus.'[1]

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[1] The following paragraphs are substantially reproduced from my *Ring of Nestor, &c.*, pp. 70–2.

[2] The un-Greek character of Elysion and its connexion with the Minoan element of Hellas has been well brought out by Dr. Ludolf Malten (*Jahrb. d. k. Deutschen Arch. Inst.*, xxviii (1913), p. 35 seqq.; *Elysion und Rhadamanthys*). His views are adopted and developed by Prof. Martin Nilsson (*op. cit.*, 539 seqq.). The 'amazing find'—as Nilsson truly describes it (*op. cit*, p. 549)—of the gold ring supplies a curiously apt commentary on the view that Elysion represents the Minoan idea of Paradise. That there was a certain assimilation with the Egyptian 'Islands of the Blest' is also very probable. Proteus, indeed, at once brings us into a Nilotic relation.

[3] *Od.* iv. 563:

ἀλλά σ' ἐς Ἠλύσιον πεδίον καὶ πείρατα γαίης
ἀθάνατοι πέμψουσιν, ὅθι ξανθὸς Ῥαδάμανθος.

We see here an abode rather of light than of darkness, and Virgil's words[2] indeed might also apply to the denizens of this Minoan After-World:

> Largior hic campos aether et lumine vestit
> Purpureo, solemque suum sua sidera norunt.

Translation of Design into Miniature Fresco.

The highly picturesque character of this composition leads to the conclusion that in this, as in other cases, the Minoan engraver had taken over his subject—much epitomized, no doubt, even in this elaborate example—from an original design in colours on a plaster panel.[3] We are led back indeed to some masterpiece in fresco painting of the kind that once adorned the Palace at Knossos, giving a still completer view of the abode of the Blessed—itself perhaps an illustration of a yet earlier poetic version—much as the celebrated painting of Odysseus in Hades by Polygnotos reflects in the main the Homeric *Nekyia*.[4] Of that painting, indeed, as it existed in the Leschê at Delphi we have the very detailed description by Pausanias,[5] and separate episodes are preserved in later adaptations,[6] but the artistic records do not reproduce the subject in any connected shape. In the design on the 'Ring of Nestor', on the other hand, we obtain at least a partial insight into the actual composition of a Minoan picture of the After-World executed some eleven centuries earlier, and, from the elements at our disposal, may even form a general idea of the colour scheme.

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[1] *The Odyssey of Homer*, Butcher and Lang, p. 67.

[2] *Aen.* vi. 640 seqq. Virgil, as Malten (*op. cit.*, pp. 49, 55) has pointed out, makes Elysion coincide with the τόπος εὐσεβῶν of the Orphic religion (the counterpart of the τόπος ἀσεβῶν).

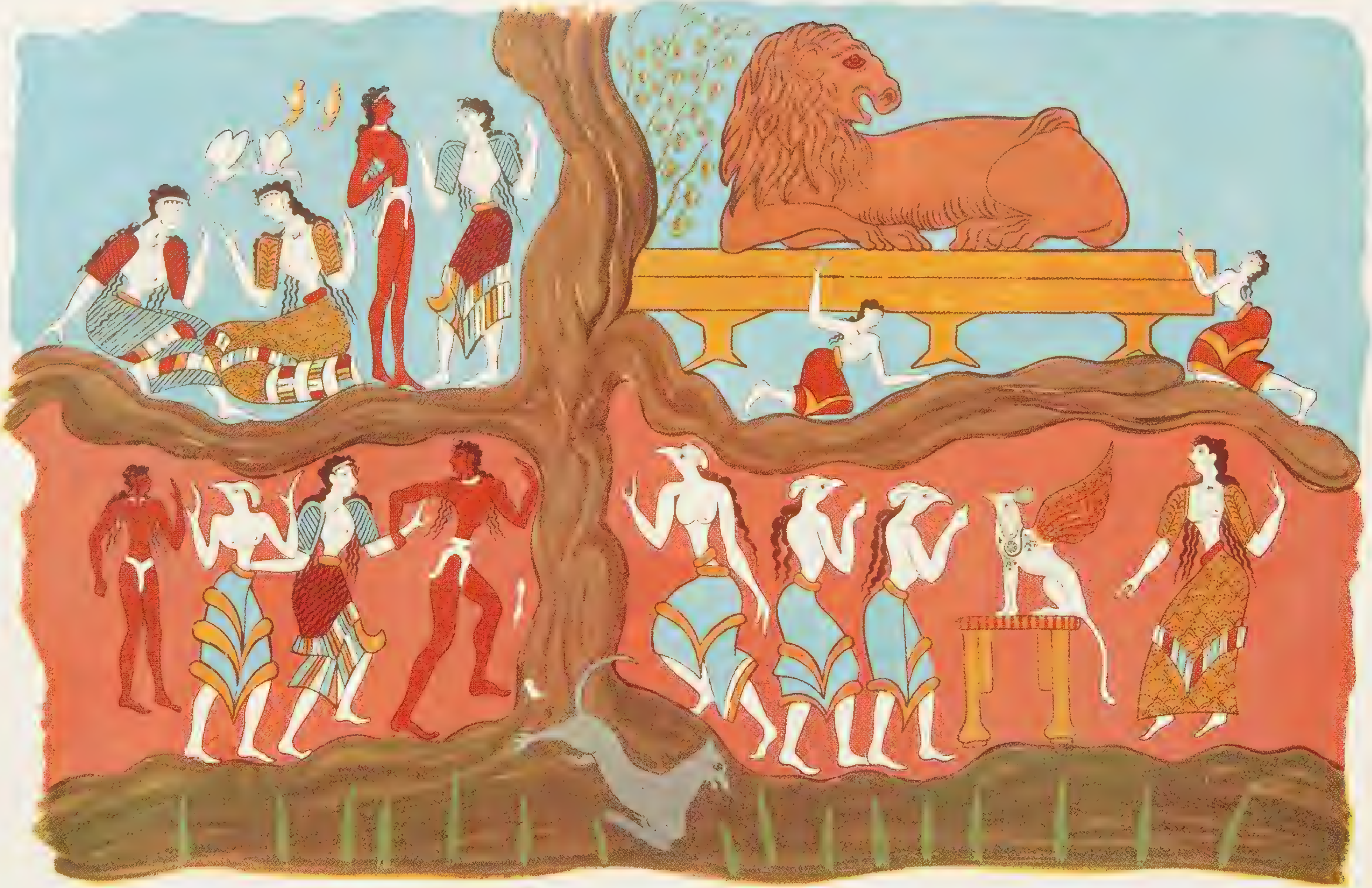
[3] See *P. of M.*, i, p. 685 seqq.

[4] Though occasionally other epic sources, such as the *Nostoi* and *Minyas*, were used. See F. Dümmler, *Die Quellen zu Polygnots Nekyia* (*Rhein. Mus.*, N.F. 45 (1890), pp. 178–202); and C. Robert, *Die Nekyia des Polygnot*, p. 74 seqq. (Sechszehntes Hallisches Winckelmannsprogramm, 1892).

[5] Lib. x. c. 28.

[6] Cf. Frazer, *Pausanias*, vol. v, pp. 376, 377: Prof. Robert, *op. cit.*, p. 53, considers that vase painters freely adapted certain groups. The division into three zones was generally adopted by the earlier restorers of Polygnotos' picture, from Count Caylus onwards, based on Pausanias' description. It thus appears in Watkiss Lloyd's adaptation of the restoration by Riepenhausen, published in the *Mus. of Classical Antiquities*, vol. i (1851), p. 103 seqq., and Plate. The groups there are very sporadic. Prof. Robert's better-known arrangement in *Die Nekyia des Polygnot* (1892), where the zone system is given up, still conveys a very disconnected impression. As to the zone hypothesis, it may be observed that there is good evidence of arrangement in at least two horizontal zones in the case of Minoan frescoes.

PLATE XXA



DESIGN ON THE 'RING OF NESTOR' TRANSLATED INTO A PAINTING
OF THE 'MINIATURE' CLASS

Translation of design into Miniature Fresco.

The evident dependence of the intaglio design on a pictorial model, coupled with the singular correspondence shown in the fashion of the dress as well as the pose and gestures of the figures with those of the contemporary class of 'Miniature Frescoes', so well illustrated at Knossos, suggested to me the desirability of an attempt to translate back the composition before us into its original form and colouring as a painted panel. Happily, in Monsieur E. Gilliéron, fils, I had at hand not only a competent artist, but one whose admirable studies of Minoan Art in all its branches had thoroughly imbued him with its spirit. He executed under my superintendence a coloured drawing, of which a reproduction is given in Coloured Plate XX A,[1] to the scale and quite in the style of the Miniature Fresco of Knossos that shows the assemblage on the Grand Stand by the Pillar Temple of the Goddess and of the fellow composition depicting the 'Grove and Sacred Dance'.[2]

To those steeped in the knowledge of the frescoes the colours to a great extent impose themselves. The male and female figures are distinguished, according to the unvarying convention, by Venetian red and white, and saffron yellow continually recurs in their dress. For the background the warm terra-cotta and the 'kyanos' blue were both used on occasion for this purpose in the early part of the Late Minoan Age. This blue, as employed in the upper spaces, gives the best suggestion of the luminous ether that surrounds the abode of the Blessed.

The brown wood-colour of the trunk and the blue band of sky, for what seems to have been regarded as an abode rather of light than darkness, also follow pictorial precedents.

Reflection of an original masterpiece representing the After-World.

It does not seem indeed to be outside the range of legitimate conjecture if we venture to recognize in the truly microscopic composition supplied by the ring from the beehive tomb of Nestor's Pylos a real reminiscence of an original masterpiece of Miniature fresco painting worthy of having adorned a Palace wall.

We have here, in fact, a hint of some much more ancient conception of the After-World—the theme, it well may be, of Epic treatment long preceding the Homeric *Nekyia*.

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[1] Dr. Martin Nilsson remarks (*op. cit.*, p. 55) with regard to this coloured reproduction that 'the similarity between the design on the ring and the Minoan wall-paintings of the Miniature style is so great that when we look at the translation of the design on the ring into Miniature fresco style, which Sir Arthur Evans adds by a happy thought, we feel immediately that this is the true source of this type of design'.

[2] For another coloured copy of M. Gilliéron's drawing, see *Ring of Nestor*, &c., Pl. V.

§ 75. UPPER PORTICOES OF N. ENTRANCE PASSAGE AND THEIR PAINTED RELIEFS OF BULL-HUNTING SCENES: COMPARED WITH THOSE OF VAPHEIO CUPS.

'Miniature Frescoes' contrasted with neighbouring deposit of painted stucco remains belonging to North Entrance Passage; Successive stages of this; Good ashlar masonry of Middle phase; Fine works of reconstruction in M. M. III a*; Proposed reconstitution of N. Entrance Passage; Approach to Sea Gate from W. and N.; Traces of inner Gateway; Safeguarding measures due to considerations of police; Lower Pillar-Hall and light-area; Presumed Upper Columnar Hall and Corridor linking it with Central Court; Portico overlooking W. side of Entrance Passage;* Loggia *with three structural divisions; Painted reliefs of bull-grappling scenes; Olive-trees in background; Scene laid in Country; Stratum containing painted fragments; Remains of rock-work foreground; Bovine reliefs; Head of gigantic bull—its noble aspect; Foot and hoof of bull; Part of woman's leg—ankle ring; Part of a female thigh; Parallels from Vapheio Cups; Recurrence of triple division; Did the Palace friezes supply models elsewhere? Fragmentary reliefs in Elgin Collection; Indications of parallel frieze in E. Gallery; Bull's leg found in connexion with it; The Vapheio reliefs; Cup A; Girl grappling bull; The neck-twisting feat; Cup B—Capture through decoy Cow; Evidences of Artistic cycle—on vases and gems; Limitations of intaglio technique; Bull on seal-impressions nosing trail—as in Cup B; Lassoing scene on gem; M. M. III date of painted reliefs from N. Entrance Passage; Relatively late date of stratum with bull reliefs; Part of reliefs seen in position by Greeks; Olive-tree reliefs at two extremities; Parallel survival of N. W. Portico; Influence of remains on imagination of Hellenic settlers.*

'Miniature Frescoes' contrasted with neighbouring deposit of painted stucco remains.

THE 'Miniature Frescoes' described in the last Sections had adorned the walls of a small sanctuary chamber and the scale was proportioned to the narrow space that had contained them. They thus present a striking contrast to the painted stucco remains found in the adjoining area that formed part of the chief public avenue of approach to the Central Court.

The little chamber from which these remains were derived had stood, as we have seen, at the angle corresponding with the structure of the Early Keep as it here bordered the Northern Entrance Passage, together with a brief section of the North border of the Central Court.

Below this angle the Entrance Passage, as shown in the first Volume of this work, had undergone three successive stages in the course of the Palace history. In its earliest phase it was an ascending gangway, seven metres broad, between a M. M. I–II wall running North from the super-

Belonging to N. Entrance Passage.

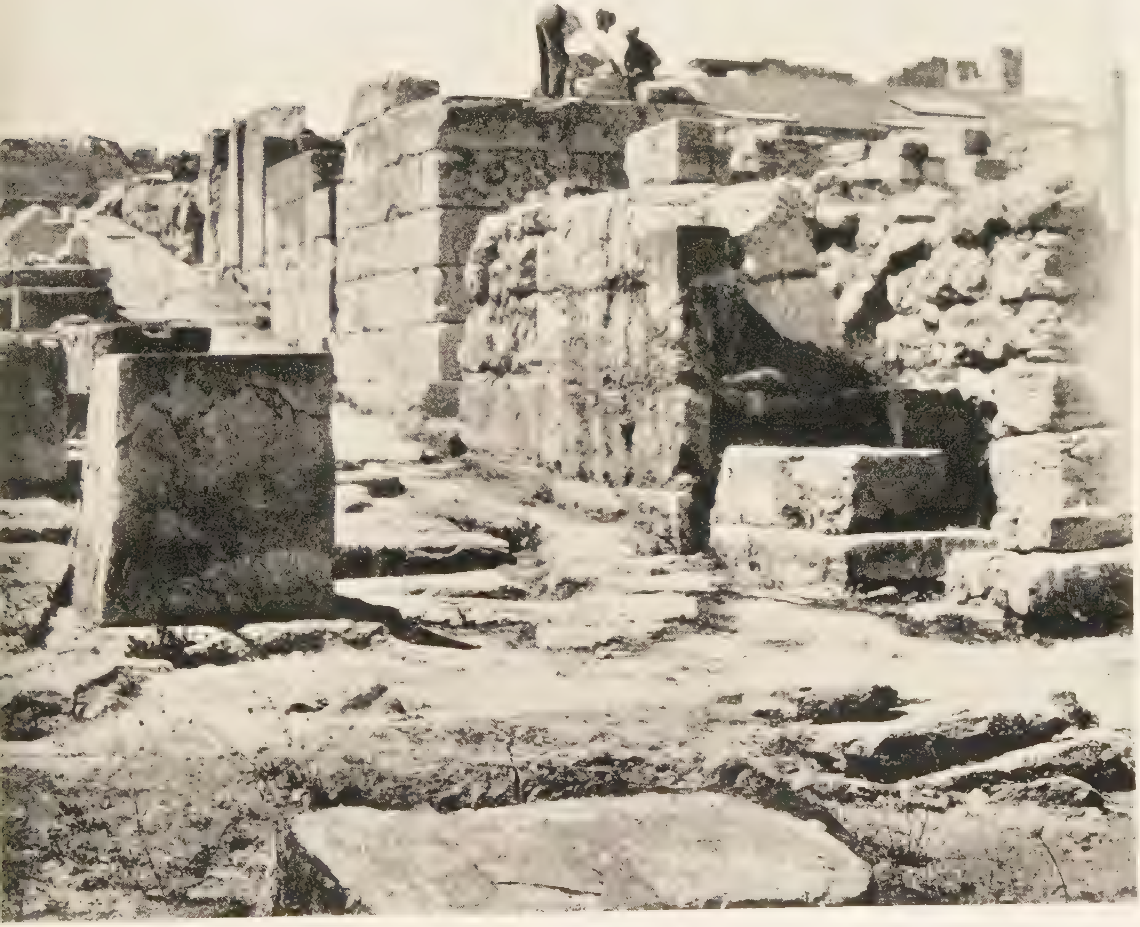

Fig. 105. View of North Entrance Passage from Pillar Hall below showing Western Line of Bastions.

structure of the Early Keep and a contemporary terrace wall running parallel with it to the East. At the beginning of the Third Middle Minoan Period this arrangement was superseded by the construction in front of the original

Its successive stages.

boundary walls of three 'bastions' on either side rising below in a continuous line, though forming level terraces above and divided by small gaps which seem to have been filled with massive upright baulks of timber. Finally, apparently in the early days of the Reoccupation period (L. M. III *a*), to afford more promiscuous facilities for access to the Central Court, the Eastern group of bastions was sufficiently demolished to allow a broader roadway to be made at a level of about a metre higher than the earlier ramp. This roadway thus extended from the face of the Western line of bastions to the old terrace wall on the East and was about five metres broad —more than two-thirds, that is, of the breadth of the earliest avenue of ingress.

Good ashlar masonry of Middle phase.

But the real interest centres on the fine ashlar construction of the middle period of this entrance system, which—so far as it was not deliberately rased on the East side—had been better preserved than any of the Palace structures except some parts of the Domestic Quarter. This, indeed, was largely due to a similarity in the conditions. Both fabrics were to a great extent backed by cuttings made for the purpose in earlier strata. The Domestic Quarter, as we have seen, was set in the 'Great Cutting' East of the Central Court. The Northern Entrance Passage was excavated out of the steep slope of the Neolithic 'Tell' on that side, thus reaching the Central Court by a gradual incline, perhaps a few metres beyond its Northern façade line. In both cases, over and above the greater security insured against earthquake shocks, the tendency of debris and later deposits to accumulate in the artificial hollow did much to protect the structural remains from the later robbers of well-cut limestone blocks who infested the site.

It is a remarkable fact that, of the fine perspective of successive structural sections—here, for convenience termed 'bastions'—rising in places seven courses high, that to-day opens before the spectator who stands in the area of the North Pillar Hall below (see Fig. 105), not one single stone was visible when the excavation of this section began.

The Northern Entrance Passage as arranged in M.M. III *a*: its Upper Galleries and Painted Friezes.

Fine works of reconstruction in M. M. III *a*.

Very complete evidence is forthcoming for the date when this North Entrance Avenue was carried out. For a *terminus a quo* the fact that the back walls of the Western line of bastion rest on walling of the M. M. II Palace is itself conclusive. On the other hand, it has already been pointed out that both the character of the masonry and the style of the mason's

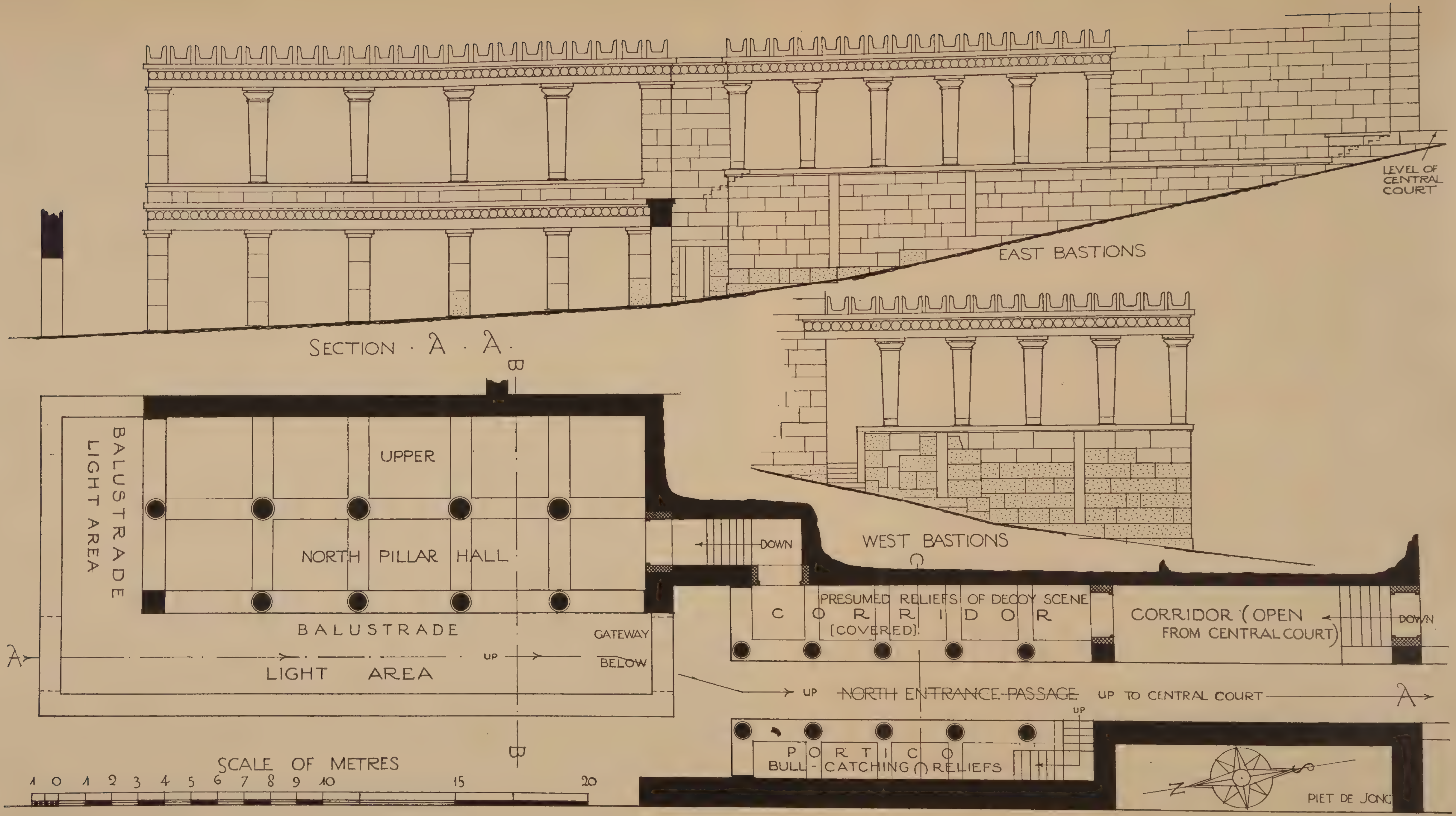
LEVEL OF CENTRAL COURT
EAST BASTIONS
SECTION · A · A ·
B
WEST BASTIONS
BALUSTRADE
LIGHT AREA
UPPER
NORTH PILLAR HALL
BALUSTRADE
GATEWAY
BELOW
UP
LIGHT AREA
A
DOWN
PRESUMED RELIEFS OF DECOY SCENE
CORRIDOR
(COVERED)
CORRIDOR (OPEN FROM CENTRAL COURT)
DOWN
UP
~~NORTH ENTRANCE PASSAGE~~
UP TO CENTRAL COURT
A
UP
PORTICO
BULL-CATCHING RELIEFS
B
SCALE OF METRES
1 0 1 2 3 4 5 6 7 8 9 10 15 20
N
PIET DE JONG

Fig. 106. Restored Upper Plan and Elevations of Northern Entrance System.

marks, such as the tridents, the double axes, and 'broad arrows' cut on the blocks, absolutely correspond with those of the ashlar masonry of many parts of the Domestic Quarter, belonging -as shown elsewhere in detail to the early phase, *a*, of the Third Middle Minoan Period. To this may be added another piece of corroborative evidence: the West wall of the three bastions on that side forms an integral part of the North-West Portico beyond, together with the adjoining Lustral Area, which has also been shown above to go back to the same M. M. III *a* phase. The North line of Bastion B is in fact the continuation of that of the doorways of the North-West Entrance. The North face of the opposite Bastion on the East side (B–B) follows the same line.

Proposed reconstruction of N. Entrance Passage.

Many elements are at our disposal for the original plan and elevation of the section of the Northern Entrance Avenue that lies below what was once the N.E. angle of the Early Keep and its superstructure. A careful study of these has led to a result, at once self-contained and answering to all local requirements, which fully explains how this approach was made the vehicle for the most splendid exhibition of the plastic art combined with the painters' skill that could have existed in the whole of the Palace precincts. Nowhere else, certainly, within the building was a place to be found for two spacious and well-lighted Galleries, facing one another, to do equal justice to these large compositions. For the structures of which such a good record has been preserved to us were associated with the remains of great painted plaster reliefs of bull-catching scenes, fragmentary, indeed, but a single piece of which—the head of the charging bull—is alone sufficient to place Minoan art, in this department at least, on a par with the masterpieces of Classical Antiquity.

The plans and elevations (Folding Plate, Fig. 106) executed, with complete architectural details, by Mr. Piet de Jong, in accordance with my general arrangement, gradually elaborated, correspond in the most exact manner with the existing remains and the space conditions, and may, indeed, be said to prove themselves.

The impressive effect of this avenue of approach was no doubt kept the more in view owing to this being the chief public entrance of the Palace. Whether or not the trident signs repeated in the North-Westernmost bastion conveyed a special allusion, this was the Sea Gate of the building. The outer gateway indeed opened West, but it clearly stood in relation to some paved way running almost North, a diagonal connexion with which is in fact preserved by a narrow causeway starting from above the 'Theatral Area' and heading towards the North Pillar Crypt and the Royal Villa.

The outer gate stood in connexion with a kind of *propylon*, the guard-room of which is clearly traceable on its South flank while to the North was, apparently, a tower. The roadway thus entered on an elongated paved space about three metres broad with a gradual rise Southwards. It is clear that, at the epoch to which the construction of the double row of bastions belonged, the upper end of this entrance space was blocked by a second gateway. The place of the massive wooden piers of this on either side could be clearly traced, the gates themselves, opening inwards, doubtless being faced by rounded posts such as we see indicated in the case of a more or less contemporary tablet of the 'Town Mosaic' representing a tower,[1] and again on the gate of the besieged stronghold on the silver rhyton from Mycenae.[2] Inside this, again, on the left was a narrow walled recess that seems to have been devised for a warder of the inner gate. (See Plan A at end of Vol. ii.)

Traces of inner Gateway.

The restored drawing of Mr. Piet de Jong (Fig. 107) shows this inner entrance and the porticoes above the ascending passage beyond much as they must originally have appeared.

Safeguarding measures due to considerations of police.

These triple safeguards—the narrowing of the entrance passage to about a third of its original size, the construction of the massive bastions within, and of a tower just outside the inner gateway on its North side—are curiously characteristic of the builders of the Third Middle Minoan Palace. There does not seem to be any probability that at the epoch to which they belong there was any serious outside menace. But there can be no doubt that in this Age the Priest-Kings of Knossos had accumulated vast stores of treasure in various materials within its walls, the evidence of which is to be seen in the 'Kaselles' at that time constructed in the magazines. It has already been shown that a large section of these was now shut off from the surrounding area, thus forming the 'enclave of the Kaselles',[3] and access to this was restricted by the construction of a wall across the Long Corridor with a doorway, the primitive key of which was no doubt in the hands of a special officer. In view of these interior precautions we have grounds for regarding the partial blocking of the North Entrance Passage as due to similar motives of police protection and general security rather than to any pressing military need.

As a whole, indeed, the successive changes in the arrangement here present a close parallel with the history of the West Magazines.

The elongated paved space between the outer and inner gates served itself as the principal light area of a large open Hall with two rows of large

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[1] *P. of M.*, i, Fig. 226 (facing p. 306), 1.

[2] See above, p. 93, Fig. 52.

[3] *P. of M.*, i, p. 449 seqq.

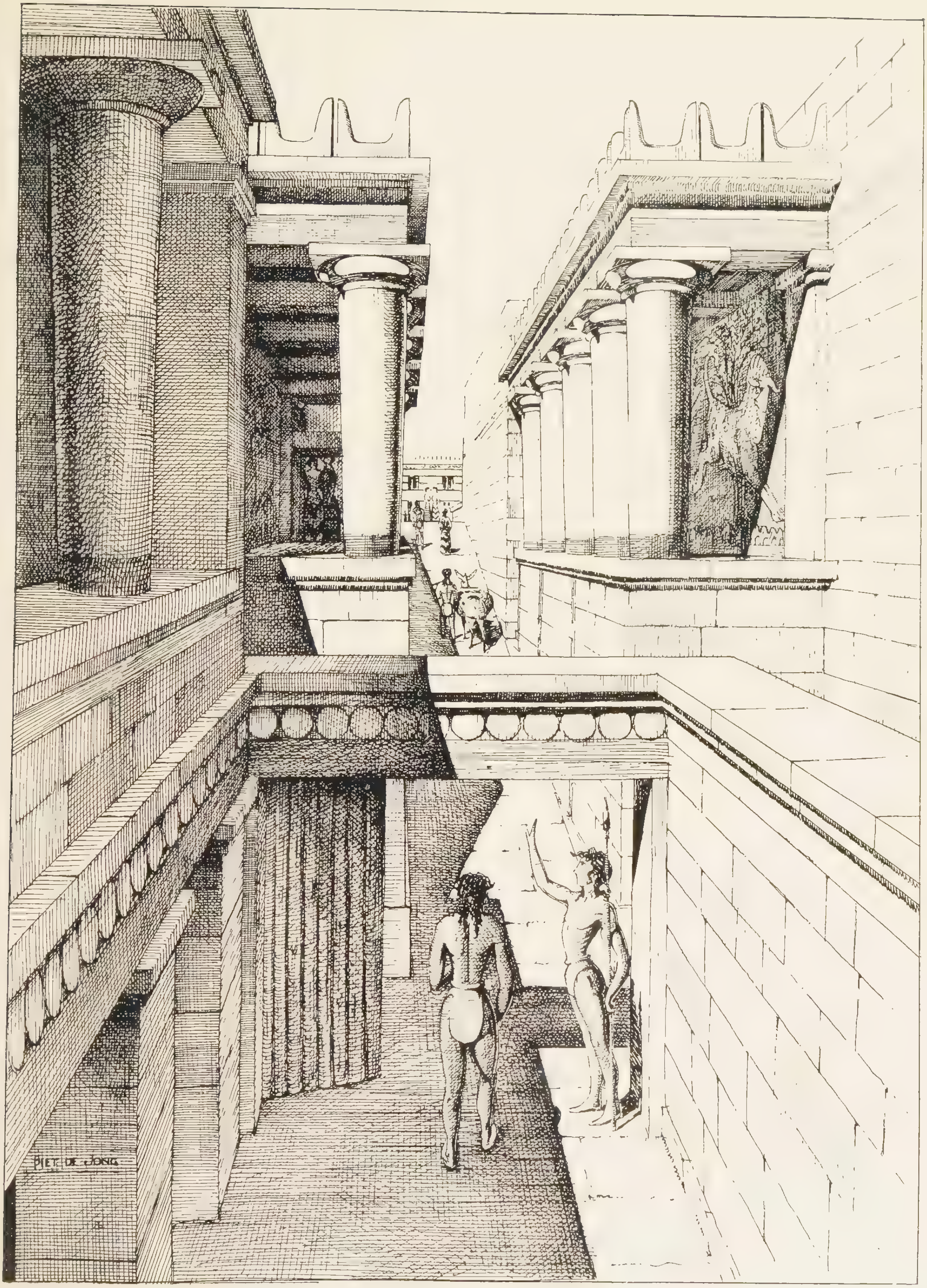

Fig. 107. Restored Drawing showing Inner Gateway of N. Entrance Passage and Porticoes overlooking Ascending Passage beyond.

Lower Pillar Hall and light area.

square pillars, the lower gypsum blocks of which were found in place. This Hall, which had also a narrower light area on its Northern border,[1] may well have been used as a temporary storehouse of goods arrived by sea and even have served as a kind of Customs House of the Palace lords, where certain dues were levied. The paved floor within slopes with the fall of the ground, there being a metre difference between the base of the pillars at the two ends. Assuming that those at the North end were of the normal height of about four metres, the two at the other extremity would have had the exceptional height of five metres.

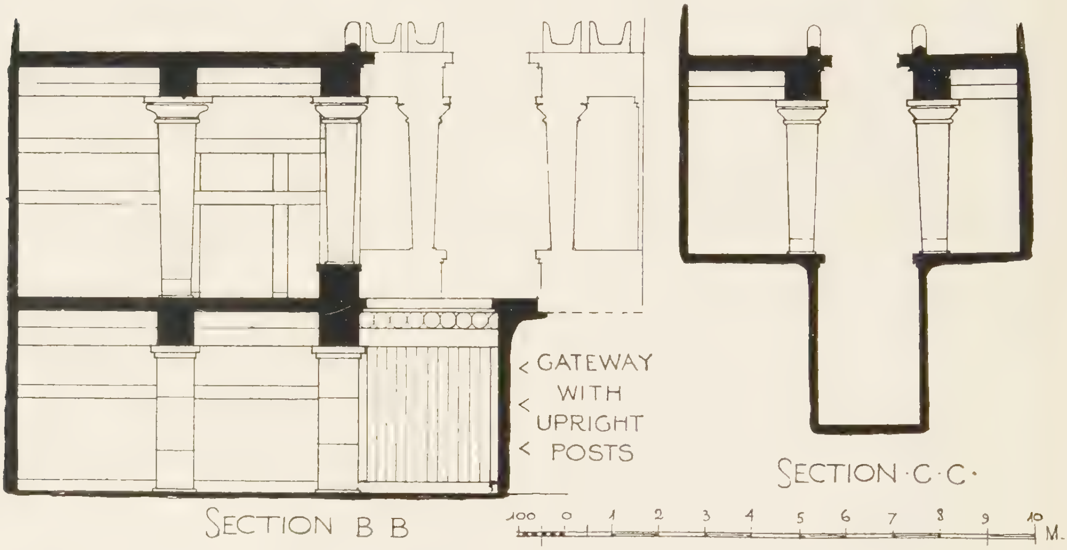

FIG. 108. SECTIONS ACROSS PILLAR HALL (B. B) AND UPPER PASSAGE WITH PORTICOES (C. C).

Presumed columnar hall.

We must infer that this Pillar Hall corresponded with an upper columnar chamber, the West and South sides of which would have been bordered by a parapet surmounted by a colonnade, while a row of four columns ran along its major axis within above the piers below. There are grounds for concluding that this upper Hall was, like the South Propylaeum, of exceptional height, the central columns being in this case approximately 4·20 metres high.[2] The roof level, which was thus five metres up, would have exactly corresponded with that of the Portico East of the Entrance Passage.

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[1] In Plan A at the end of Vol. ii, Pt. II, the two Eastern bases, the existing outline of which is irregular, are set out as column bases, but this is hardly probable.

[2] As compared with about 4·60 metres in the case of the columns of the S. Propylaeum. The columns above the parapets would thus have had the normal height of about 3·60 metres required by the breadth of their espacement from one another, this espacement being fixed by the position of the pillars below.

Corridor linking Upper Hall with Central Court.

A corridor of communication was obviously necessary to bring this fine Columnar Hall into direct connexion with the Central Court and adjoining Palace regions, and it will be seen that the laying out of the terrace formed by the bastions East of the Entrance Passage had this special object in view.

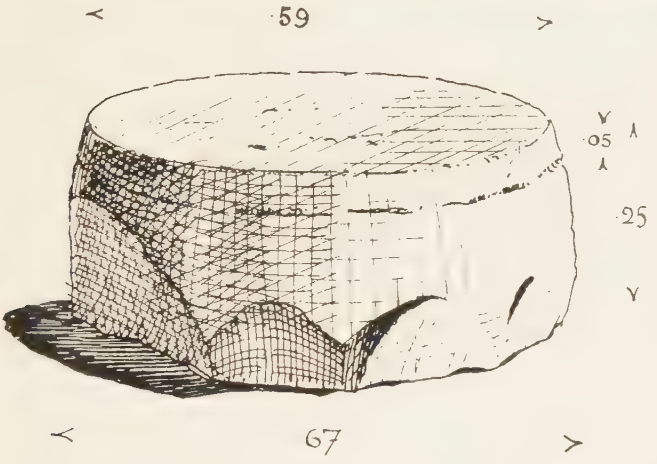

Fig. 109 a. Limestone Column-base from N. End of Portico.

The terrace on the West side, which at most supported a *loggia* or gallery closed at its North end, was given a width of 2·20 metres, thus allowing a space of 1·50 metres between the columns and the wall. But the remains of the bastions forming the substructure of the Eastern terrace level go back 2·85 metres from the line of the roadway, which would have left a clear space of 2·20 metres between the columns and the back wall, affording convenient room for a through passage. See Section C. C., Fig. 108. Owing to the slope of the entrance ramp the floor of the Corridor at its North end is 1·5 metres above that of the Columnar Hall, a matter of seven low steps. As already observed, however, the additional height of the Hall in comparison with that of the Corridor—about 5 metres as compared with 4—brought its roof to the same level. (See Elevation, Fig. 106.)

Portico overlooking W. side of Entrance Passage.

Of the opposite gallery, of which seven courses of the Northern supporting bastion were preserved—almost the full height of the terrace—five metres at that point—we have much more precise information. On the outer, Northern edge, of this, only slightly displaced from its original position, was found the limestone column-base (Fig. 109 a), 59 cm. in diameter and belonging thus to a column about 3 metres in height—which answers to that postulated for both this and the opposite colonnade. It had been fixed in the floor, showing that no parapets existed in these cases. The North end of the terrace where this base occurred overlooked a void, so that it could never have been a thoroughfare. On the other hand, its back wall continuously separated it from the contemporary North-West Portico and entrance system. Only at its Southern end, where the terrace was only two and a half metres above the pavement of the ramp, there is a well-defined gap in the masonry through which a double flight of twelve steps would have reached the upper level. What seems to be part of a base slab of the lowest step is actually in position.

Loggia with three structural divisions.

Except for the stepped access from the roadway, this Western terrace thus formed an enclosed *stoa* or elongated *loggia*. It will be seen that the positions occupied originally by the upright baulks along the face of the supporting wall above the roadway suggest a division of the gallery into three almost equal sections (Figs. 106, 114). Grouping the baulks with the two outer sections, the first of which is broken by the flight of steps, we obtain, indeed, the following espace-

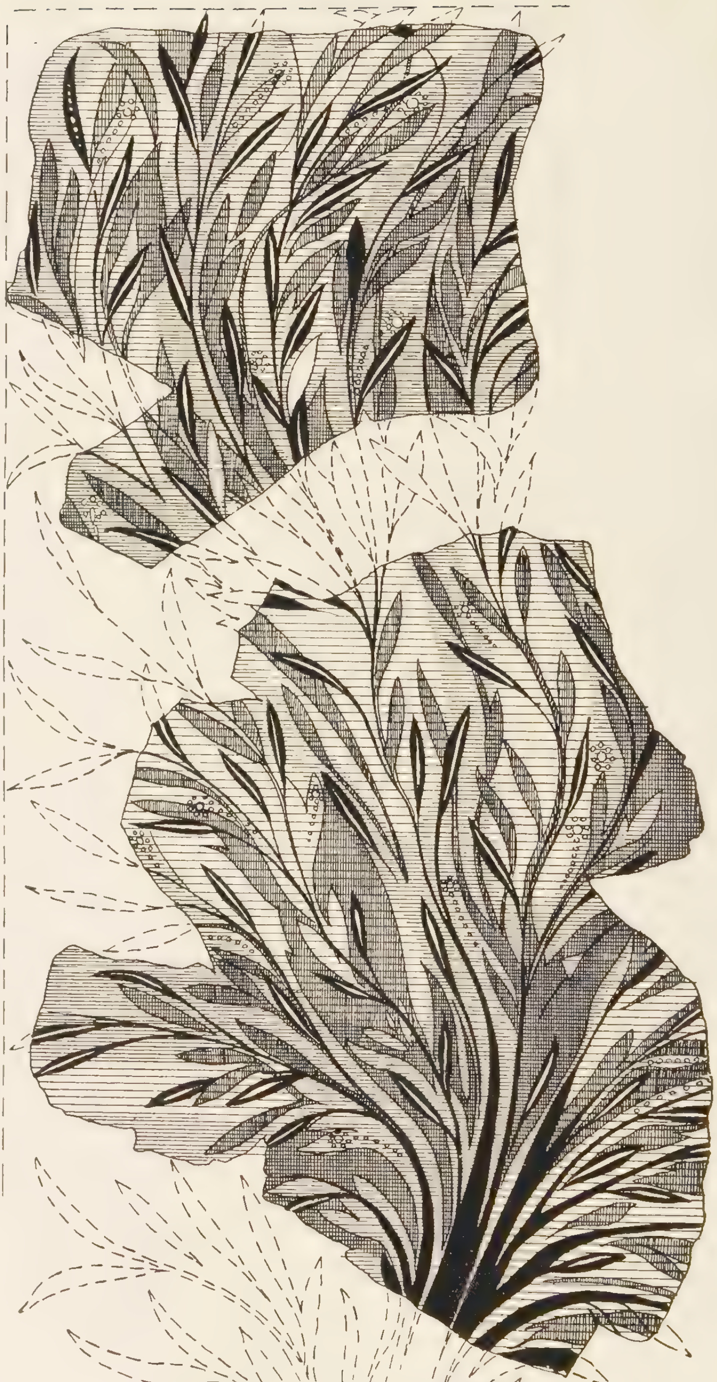

Fig. 109 b. Part of Flowering Olive-tree from S. End of W. Portico: Northern Entrance Passage.

ments. The first and second sections would each have been about 4·60 metres or about 15 feet in length, and the third 4·25 metres. The parallel terrace on the East side showed divisions corresponding with these.

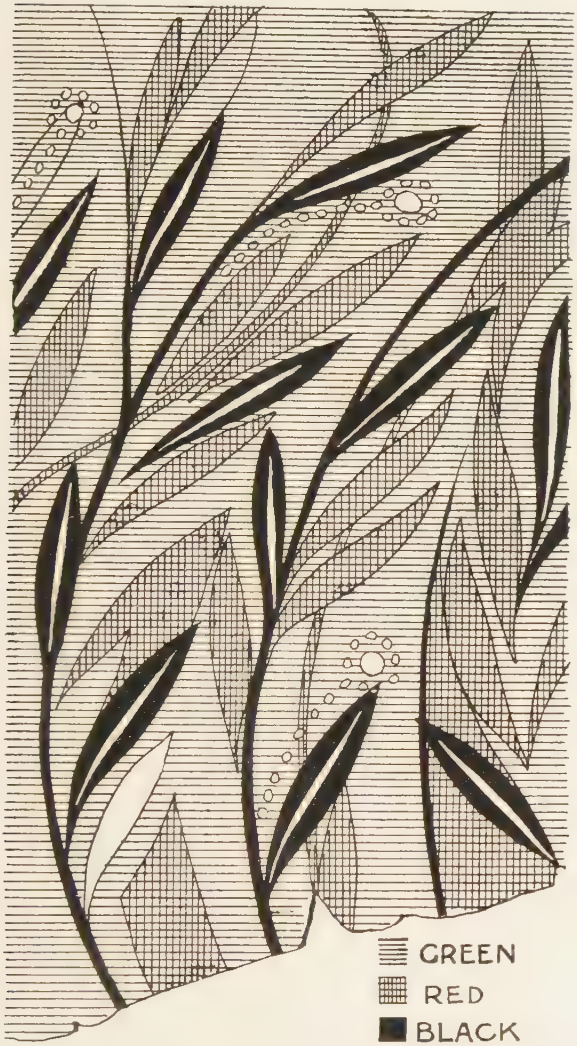

Fig. 110. Details of Olive Sprays from Fresco shown in Fig. 109. ($\frac{1}{1}$) (See too Vol. ii, Pt. II, p. 474.)

This triple division, so approximately exact, will be seen to have a possible bearing of great interest on the arrangement of the series of painted stucco reliefs, which, according to the clear evidence that has come down to us, occupied the backwall of the *loggia*.

Painted Reliefs from Frieze in Western Gallery: Remains of Olive-trees.

Bull-grappling compositions.

These reliefs clearly belonged to some great composition representing bull-catching or bull-grappling scenes. The first group of fragments came to light—about 1·50 metres beneath the surface level at this point—in the space included by the opening for the flight of steps by which the gallery was reached from the upper part of the roadway. Here, besides animal pieces, were considerable parts of the foliage and branches of a flowering olive-tree, forming part of the left upper corner of a large panel (Figs. 109 b, 110).[1] To harmonize with the figured reliefs of the composition the lines of the small branches, including the leafy sprays, are in each case slightly bossed. The leaves

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[1] The horizontal upper line shows a slight curve forward where it reached the wooden beam above. The perpendicular border on the left is also well preserved. It had a

Olive-trees of back-ground.

are alternately of green, red, and black, in a few cases white, a naturalistic reflection of the varying hues visible in the foliage of olive-trees, of which we already find examples in early M. M. III wall-paintings.[1] An exquisite specimen from a basement behind the Stepped Porch is here repeated in Fig. 111.

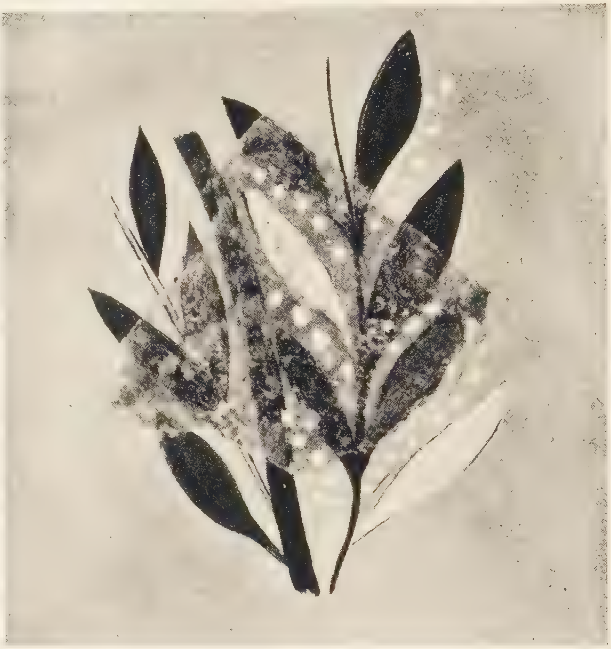

Fig. 111. Fragment of M. M. III Fresco from Basement near Stepped Portico, showing Olive Sprays with Red, White, and Black Leaves.

This variation in tint appears indeed still earlier on a fragment of M. M. II *b* polychrome pottery here reproduced in Fig. 112.[2] Here, too, we have similar asterisk-like flowers. This long artistic tradition of reproducing the seasonal variations of olive foliage finds a more distant sequel in a fragment of wall-painting recently discovered at Tell-el-Amarna,[3] which supplies a very definite proof of Egyptian indebtedness. In the fresco before us the flowers depicted facing, like white asterisks,

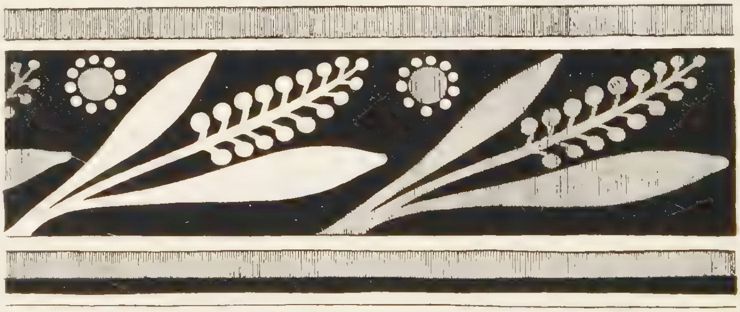

Fig. 112. Fragment of M. M. II *b* Polychrome Pottery from Palace Site, Knossos, showing Red and White Olive Sprays.

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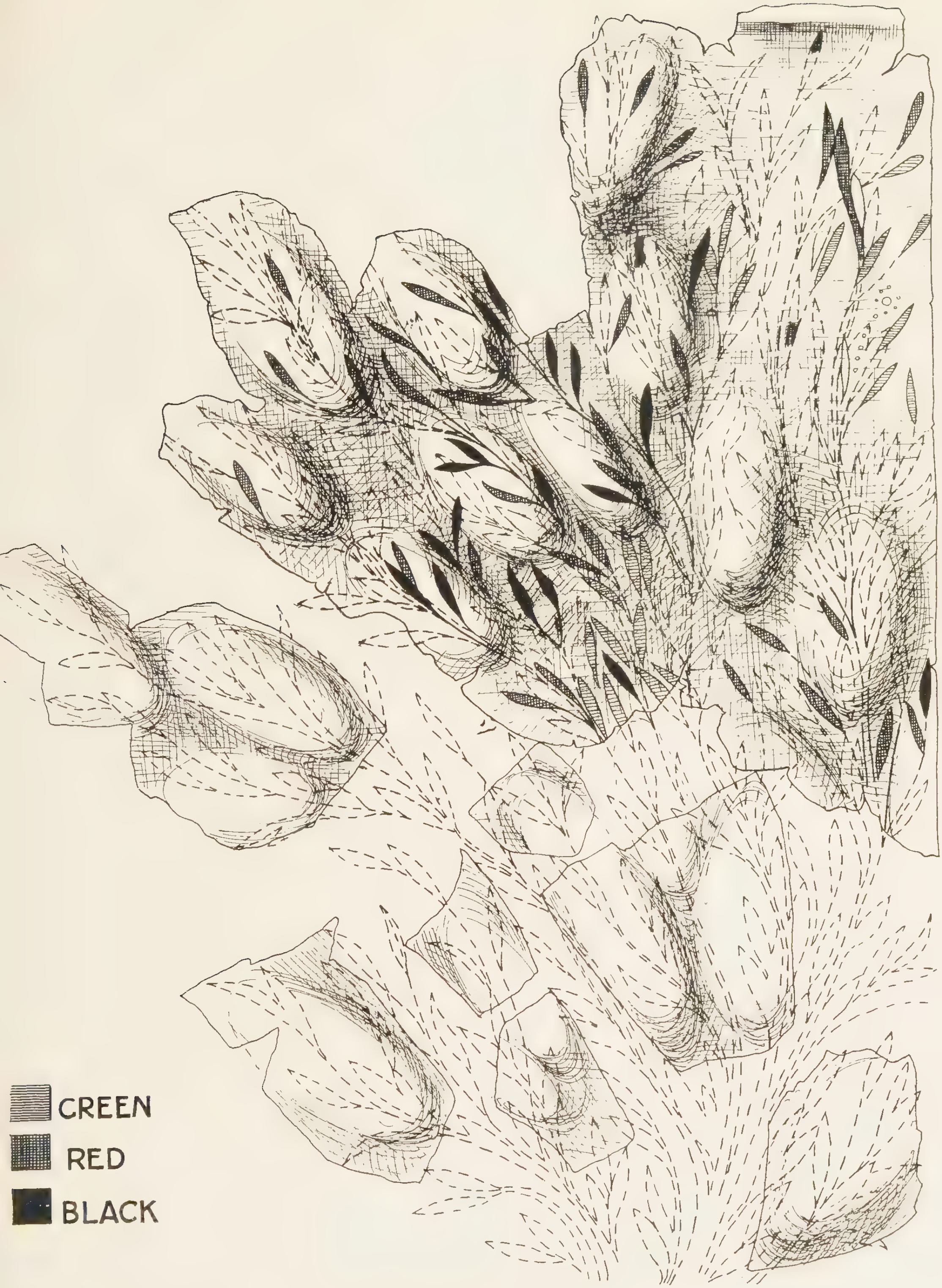
square section. The upper piece is 21 cm. wide by 21·4 high; the lower 27 cm. wide by 31·5 cm. high. The two pieces together, which only show the tops of the branches, are 52·9 cm.

[1] *P. of M.*, i, p. 536, Fig. 389. Dr. Rodenwaldt (*Tiryns*, ii, p. 195) also appositely compares the style of the olive sprays with that of the plants on the Hagia Triada frescoes.

[2] See *ibid.*, p. 263, and Fig. 194, *g*.

[3] The design seems to be a conventional rendering of olive-trees with dark green and grey leaves. The fragments are now in the Ashmolean Museum.


CREEN
RED
BLACK

G. 113. Part of Olive-tree with Green, Red, and Black Foliage on Oval Bosses from Middle Section of West Loggia: N. Entrance Passage.

much resemble those of the M. M. II *b* ceramic example referred to above, while the dotted stalk conveys a conventionalized reminiscence of the budding sprays. (See Fig. 110.[1])

It must be said that on the whole these details, and the parallels that they evoke, give an archaic impression and incline us to place the execution of this wall-painting well within the limits of M. M. III.

The other remains of olive-trees occurred above the roadway, from about the middle of the Portico onwards, the principal piece being found at the farther or Northern extremity of the terrace wall under Bastion A. The painted surface in this was a good deal worn away, but the foliage with its alternating green, red, and black tints was of much the same character as the other. Here too the surface was slightly relieved, in this case, in the form of a succession of oval bosses following the ramification of the branches and twigs on which the leaves and stalks were painted. Of the larger piece of this, that it was possible to put together,[2] a part of the upper ridged margin as well as the upper border on the right was preserved, showing that it had formed the upper right-hand section of a large panel with a wooden casing (Fig. 113).

Scene laid in country.

The insertion of olive-trees in this composition affords a valuable indication that the bull-grappling scenes that it represented took place in the open country in contradistinction with the acrobatic feats connected with an artificial arena, or bull-rings, such as those seen on the fresco panels to be described below, from the Eastern terrace of the Palace.

There can be little doubt that these painted plaster reliefs of olive-trees, a fair proportion of which was in each case continuously preserved, filled the ends of the terminal panels of a long composition of which remains were brought to light at intervals on the same approximate level over a length of about 13 metres. It is a remarkable fact that whereas the other fragments found stood in no direct connexion with one another and seem to have been casually swept together, a large part of these two trees showing their exterior borders should in these cases have been deposited in positions closely bordering what we may believe to have been their original place on the wall. It seems possible that the terminal wall-section to the South and North may have been more strongly compacted with a view to holding the enclosed panels.

The principal remains of painted plaster fragments lay along the dotted line across the elevation on the folding Plate, Fig. 114, as indicated by the

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[1] Reproduced from *op. cit.*, ii, Pt. II, p. 474, Fig. 281.

[2] The larger piece is 52·5 cm. high and 48·2 broad.

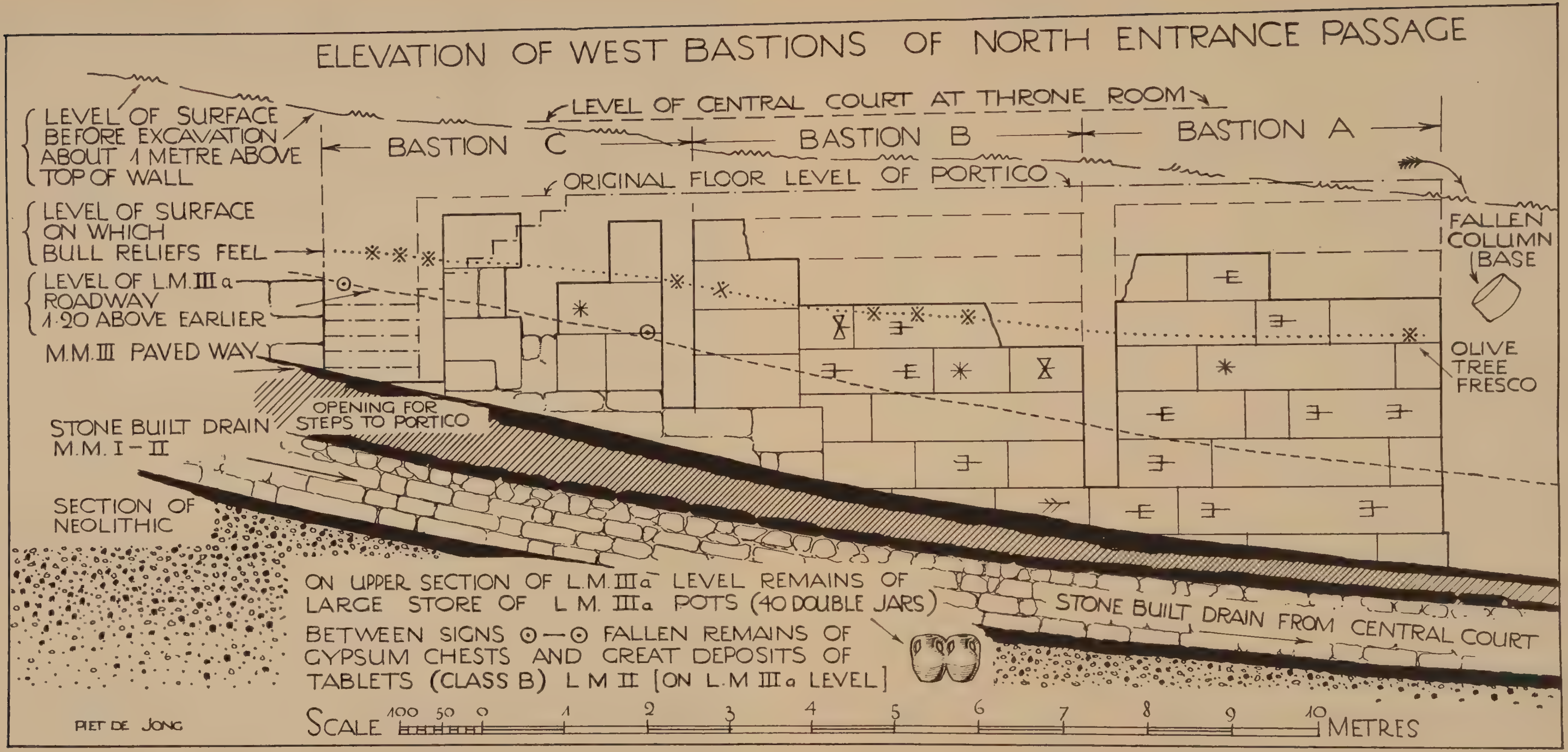
ELEVATION OF WEST BASTIONS OF NORTH ENTRANCE PASSAGE
LEVEL OF SURFACE BEFORE EXCAVATION ABOUT 1 METRE ABOVE TOP OF WALL
LEVEL OF CENTRAL COURT AT THRONE ROOM
BASTION C
BASTION B
BASTION A
ORIGINAL FLOOR LEVEL OF PORTICO
LEVEL OF SURFACE ON WHICH BULL RELIEFS FEEL
LEVEL OF L.M.III a ROADWAY 1·20 ABOVE EARLIER
M.M.III PAVED WAY
FALLEN COLUMN BASE
OLIVE TREE FRESCO
OPENING FOR STEPS TO PORTICO
STONE BUILT DRAIN M.M. I – II
SECTION OF NEOLITHIC
ON UPPER SECTION OF L.M.III a LEVEL REMAINS OF LARGE STORE OF L.M. III a POTS (40 DOUBLE JARS)
BETWEEN SIGNS ⊙—⊙ FALLEN REMAINS OF GYPSUM CHESTS AND GREAT DEPOSITS OF TABLETS (CLASS B) L M II [ON L.M III a LEVEL]
STONE BUILT DRAIN FROM CENTRAL COURT
PIET DE JONG
SCALE 100 50 0 1 2 3 4 5 6 7 8 9 10 METRES

Fig. 114. Elevation of West Side of North Entrance Passage showing Earlier and Later Levels of Roadway and Line on which the Painted Reliefs were deposited.

Stratum containing painted fragments.

asterisks.[1] They were largely embedded in debris of rubble masonry belonging to the face of the back wall to which the stucco base of the reliefs had been applied. The whole deposit indeed seems to mark a destruction of the upper fabric of the Portico, carried out at some particular time. As the stratum itself was on an average quite a metre higher than that on which L. M. III *a* pottery rested, there is every reason for believing that this destruction took place not earlier, at least, than the Geometrical Age, the remains of which appear in the neighbouring area North of this.[2]

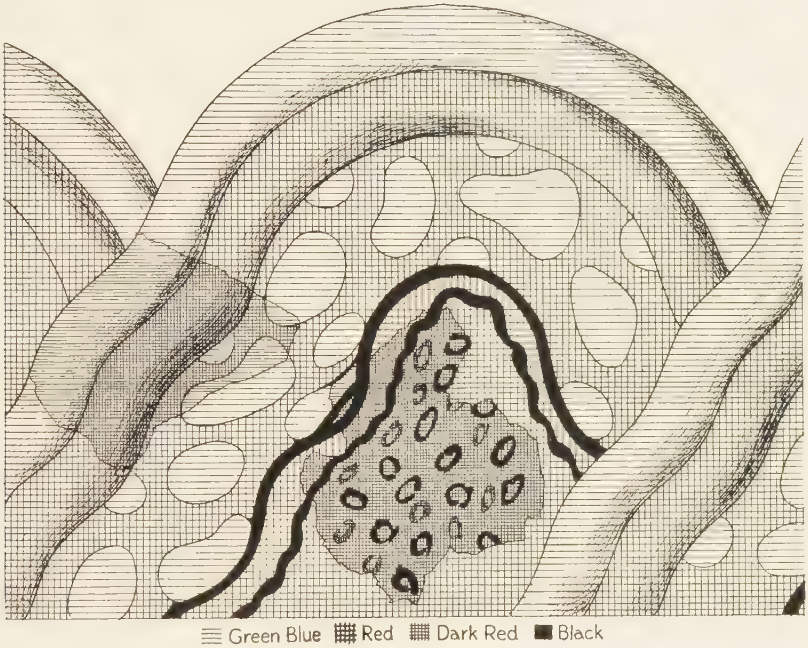

Fig. 115. Part of Foreground of Stucco Friezes showing Conventional Rockwork.

Remains of rock-work foreground.

The striving after a natural effect in the painted reliefs of the olive-trees stands in strong contrast to the very artificial manner in which the rocky foreground of the composition was executed. Some fragments of this, found together about the centre of the line of deposit, are restored in Fig. 115, showing part of a band of intersecting waves with relieved borders, one of them about 18 centimetres in height, though probably of varying dimensions, and representing the grain of the stone in the conventional manner. The outer curves here are coloured a bluish green, the inner a deep red, while, within this, is a cut conglomerate section repeating the same hue with inner black bands, containing red and black-bordered pebbles.

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[1] These must not be confounded with the eight-rayed star signs on some of the blocks of the 'bastions'.

[2] The first definite remains of the 'Geometric' town begin about 20 metres North of the Palace boundary on this side. Here a well containing an abundance of 'Geometric' pottery had been sunk on the Southern border of the Minoan 'Pillar Crypt'.

Bull-grappling Reliefs.

Bovine reliefs.

Parts of bovine reliefs came out at intervals along the whole of this stratigraphical horizon. These belonged to more than one animal, though they were much mixed up and in many cases very fragmentary. Among the better defined pieces was a fore-thigh, remains of several legs, and part of an animal's flank—63 centimetres by 43·5—showing on the left a red ground with a waved edge, succeeded by a broad white patch on which were red spots, one of them of the characteristic quatrefoil shape.

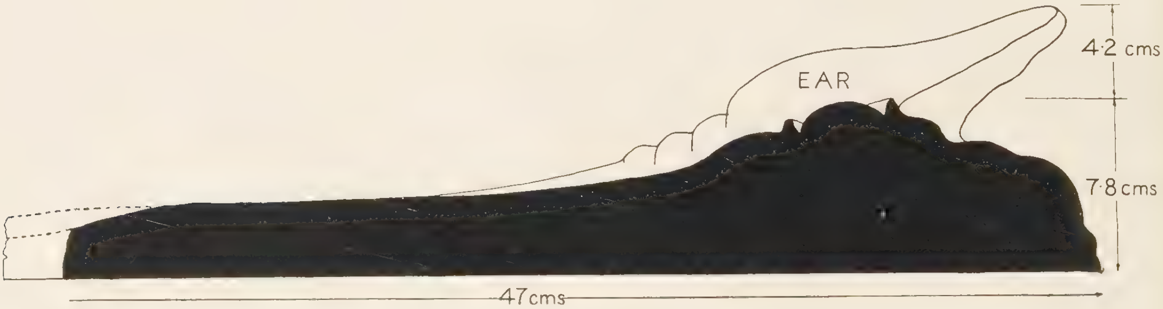

Fig. 117. Section of Bull's Head Relief across Eye and Forehead.

The surface of this was much abraded, but it is possible that it belonged to the same animal, of which an almost complete head was found. This lay about 80 centimetres beneath the surface, a metre out from the border-line of Bastion B and somewhat North of its centre—at a spot where these remains were specially concentrated.

Head of gigantic bull: its noble aspect.

This head, which is that of a gigantic bull of the Urus breed and measures 64 centimetres from the back of the head behind the ear to the tip of the nose, was incomparably the finest of all the painted stucco reliefs here discovered (Fig. 116 and Section, Fig. 117). It still stands forth as one of the noblest revelations of Minoan Art.

It is simple and large in style, but instinct with fiery life. The moulding, though partly in a lower plane, merges into very high relief in the treatment of the eye and forehead, while the upper circuit of the ear is executed in the round. The surface is of a deep ruddy hue with a bluish white spot of

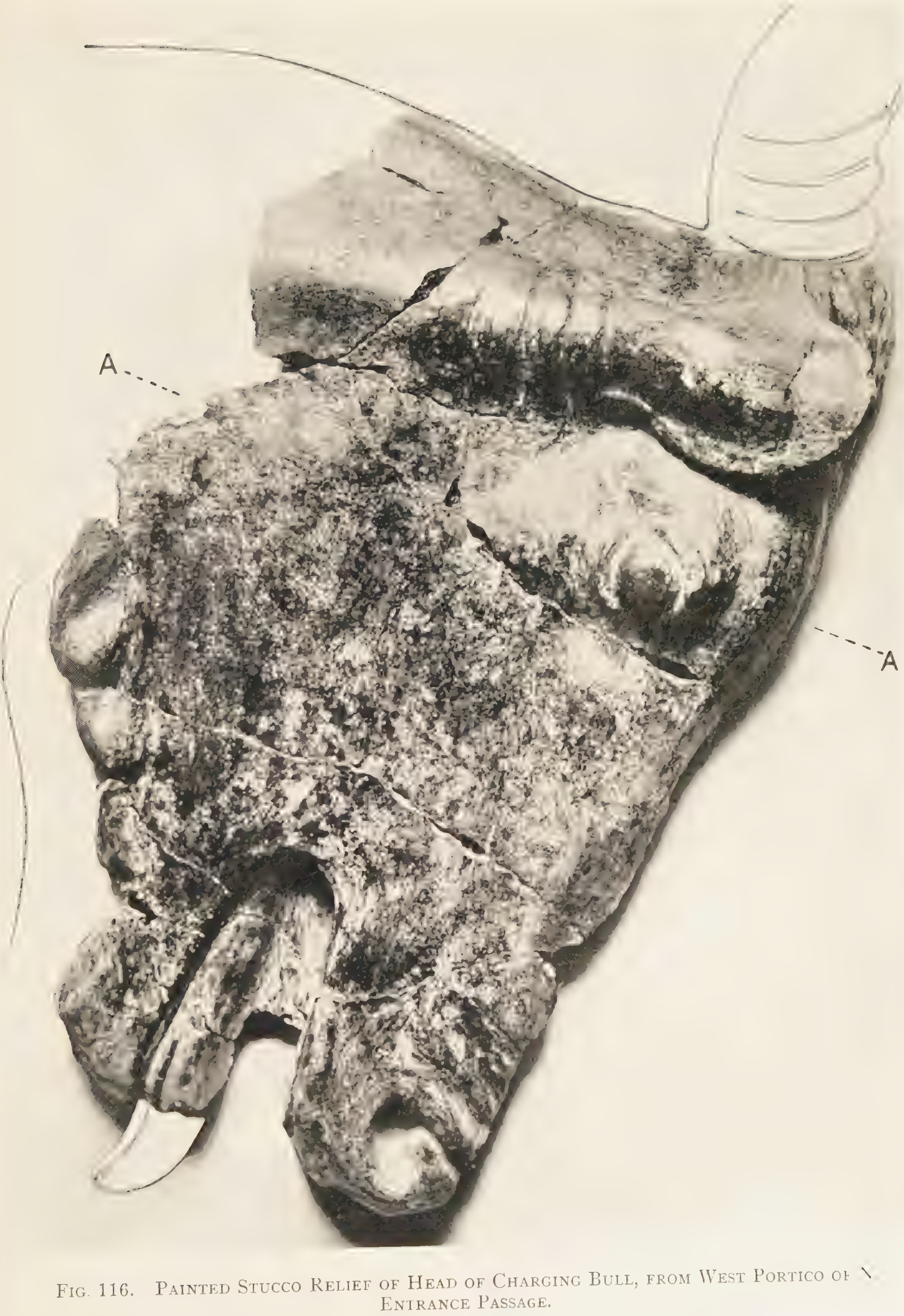

Fig. 116. Painted Stucco Relief of Head of Charging Bull, from West Portico of N Entrance Passage.

cusped outline on the bridge of the nose. The pupil of the eye is of a yellowish white, and the eye-ball, ringed with coloured bands, is exceedingly prominent (Fig. 118). The upstanding ear marks intense excitement; the tongue protrudes, the hot breath seems to blow through the nostrils. The folds of the dewlap show that the head was in a lowered position—it is that of a bull coursing wildly.

Foot and hoof of bull.

It is possible, indeed, that a bovine foot and hoof with a part of the background attaching to it found a couple of metres South of this really belongs to the same animal. Both the character of the relief and the bright red colour are identical, and the action is seen to correspond. As its outline and the set of the hoof shows, it is part of a hind leg and also belonged to a galloping animal (Fig. 119).

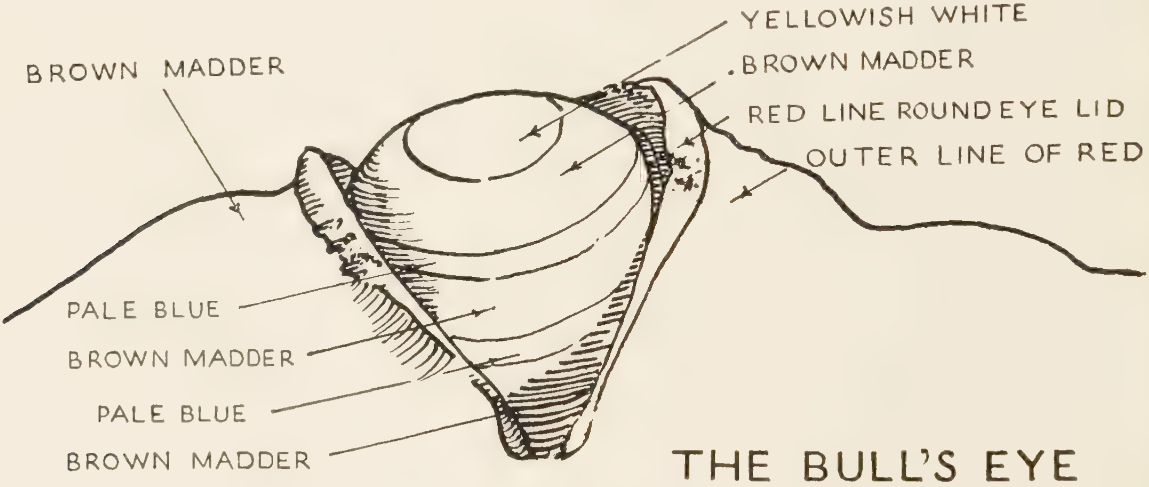

Fig. 118. View of Bull's Eye.

The hoof has no connexion with the ground, and, like the forepart of the head itself, is set against a background of the same bright ruddy hue—the Minoan artists never shrinking from profiling figures against backgrounds of almost the same tone of red.

At the same time, however, behind the bull's ear there appears a patch of blue, which may well have formed an upper zone of the field. This blue upper zone seems to have recurred on other panels.

Part of woman's leg.

A fragment found near the bull's head was at first erroneously taken to be part of its horn—its taper form and the corrugated surface towards the larger end, like that of the root of the horn, suggesting a superficial resemblance.[1] Its real character, however, has long been recognized, and there can be no doubt that it formed part of a woman's leg—the pale tint, in this case, a greyish white, being the regular mark of the female sex. The tendons are rendered in a symmetrically conventional manner, and above the ankle, where it was broken off, traces of the horizontal bands of the usual puttees or leggings are clearly visible (Fig. 120).

Just at this point, where the ankle is broken away, there is visible a small section of a blue band running diagonally downwards. In this band we must certainly recognize a part of one of the silver ankle-rings, coloured blue, already described in connexion with the 'Procession Fresco'.[2]

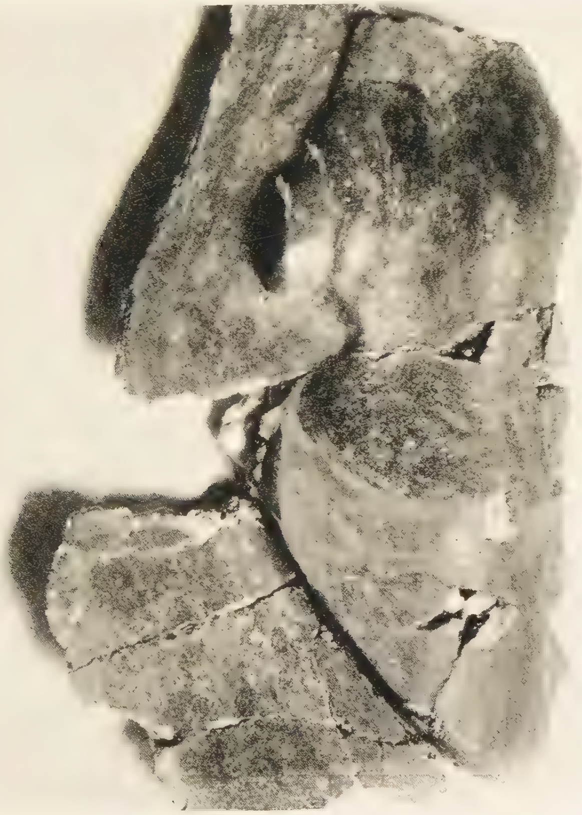

FIG. 119. FOOT AND HOOF OF BULL'S HIND LEG.

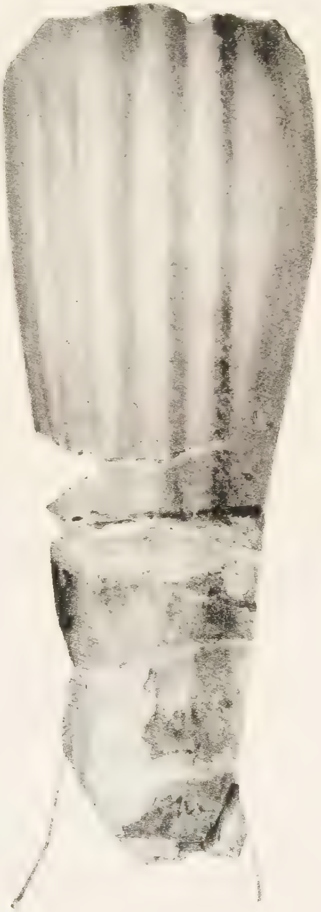

FIG. 120. PART OF LEG OF FEMALE 'COW-BOY' WITH TRACES OF PUTTEES AND ANKLE-RING.

The leg is turned to the left, in the direction opposed to that indicated by the bull's head, with which it seems most natural to connect it. We

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[1] In *Knossos, Report*, 1900 (*B. S. A.*, vi), p. 52, Fig. 10, it is set against the stump of the horn seen on the bull's head.

[2] *P. of M.*, ii, Pt. II, pp. 726, 727, and Fig. 454.

Ankle-ring.

have here, then, in all probability, some parallel scene to that on the Vapheio Cup,[1] in which a girl is seen clinging desperately with both legs and arms to the horns of a charging bull.

Part of female thigh.

Among other fragments of human figures was a section of a bare female thigh, broken off a little above the knee and presenting a pure white surface. It is possible that this and what seems to have formed part of a female arm may have belonged to the same figure as the leg. Only one piece of a male bull-grappler was sufficiently preserved for a definite description. This was a section of a fore-arm still showing its ruddy flesh tint.

On the West side, then, of the Entrance Passage, bordering the supporting bastions of the original Portico, we have evidence on the same archaeological stratum of the occurrence of a series of deposits of painted stucco fragments, supplying at least a general idea of the composition.

We have here olive-trees, parts of at least two bulls—one at full gallop with his head down—fragments of a man's arm and of the legs of a woman of the 'Cow-Girl' class. We see, too, the remains of a conventional rock-work border forming the base of the whole. In addition to this there is evidence of a triple structural division, suggesting a corresponding division of the series of reliefs.

Indications of Parallel Frieze at Back of Eastern Gallery of Entrance Passage.

Indications of parallel frieze in E. Gallery.

If, moreover, we may judge by the architectural arrangement now restored as well as by the fragmentary evidence of two actual reliefs, some similar frieze had existed on the Eastern side of the gangway.

It has, indeed, been pointed out above that the need of providing a corridor of approach, more or less on the level, from the Central Court to the Upper North Hall as well as the dictates of architectural symmetry must lead us to suppose that the Western Portico, to which bull-hunting scenes resembling those of the Vapheio Cup A belonged, was faced by another on the Eastern side of the Entrance Passage.

Bull's leg found in connexion with it.

The deliberate destruction of a large part of the substructure of this gallery would necessarily have obliterated most traces of its original decoration. Isolated pieces of evidence of the existence of painted stucco reliefs on this side did, however, occur in the shape of two fragments of bull's legs, one white with black spots like that from the 'Spiral Fresco Area',[2] found above the remains of Bastion A A, and which seems to have belonged to the adjoining section of the back wall that had once existed above the terrace-level at this point. The fragments failed to convey any idea of the action of the animal or animals to which they belonged, but there remains a strong *a priori* presumption that the frieze on this side stood in a relation to the other, similar to that presented by the Vapheio vases and in an imperfect form by the Elgin reliefs. If on the one side the spectator could see the sensational episodes of a drive of bulls, on the other he might have followed the gradual unfolding of a more quiet plot resembling that of the Vapheio Cup B, and illustrating the capture of a bull by means of a decoy cow.

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[1] See below, p. 181, and Fig. 125. The sex of the figure, as there demonstrated, is clearly brought out.

[2] *P. of M.*, i, p. 376, Fig. 273: this was evidently more or less contemporary.

Parallels suggested by Vapheio Cups.

Parallels from Vapheio.

All the features of which we have indications in the remains of these painted stucco friezes recur in the repoussé reliefs of the Vapheio Cup A that supply a detailed record of episodes in a Minoan composition relating to the hunting of wild or half-wild bulls (Fig. 123, A). In this case, as we may infer from the date palms[1] represented as well as the olives (not necessarily wild), the scene is laid in a more or less civilized country-side or park, though with rocky hills around, indicated by the borders above and below. Here, also, as in the parallel class of designs illustrating the sports of the bull-ring, it will be seen that 'cow-girls' as well as boys took part in the dangerous acrobatic feats.

Recurrence of triple division.

In this case, too, the subject is clearly divided into three separate episodes, and the same triple division is noticeable in the composition presented by the other cup, the subject of which illustrates the capture of a bull by means of a decoy cow.

A *terminus a quo* for the date of the Vapheio Cups was supplied by the last ceramic elements of the Tomb, repeating the 'Ogival Canopy' motive and belonging to L. M. I *b*, or approximately from 1500 to 1450 B.C.,[2] though it is possible that the cups themselves dated back to at least the earlier phase of L. M. I. The shape of the cups, as has been already shown, is distinctively Cretan, and a specimen of this type occurred in a M. M. III interment at Mochlos (Fig. 122).[3] The characteristic handle, indeed, is already imitated in clay at least by the beginning of that Period (see Fig. 121)[1] and must go back to metal prototypes dating from the preceding Age (M. M. II).

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[1] From such scenes as that on the gem showing Genii watering nursling palms (see A. E., *Myc. Tree and Pillar Cult*, p. 3 [101], and Fig. 1) it is reasonable to conclude that the date palm was introduced by the Minoans into Crete, and did not form part of the indigenous Aegean vegetation. But it is clear, as is shown by the group of three palms on a fine polychrome jar, that they had already become a familiar feature of the landscape by M. M. II *b*. They also appear on an intaglio of that date.

[2] *P. of M.*, ii, Pt. II, p. 490, Fig. 296 A, *a*, *b* (Tsountas, 'Εφ. 'Αρχ., 1889, Pl. VII, and p. 154), and see p. 489 seqq.

[3] Seager, *Mochlos*, p. 62, xii f., and Fig. 31. Cf. *P. of M.*, ii, Pt. II, p. 481, Fig. 288, *c*.

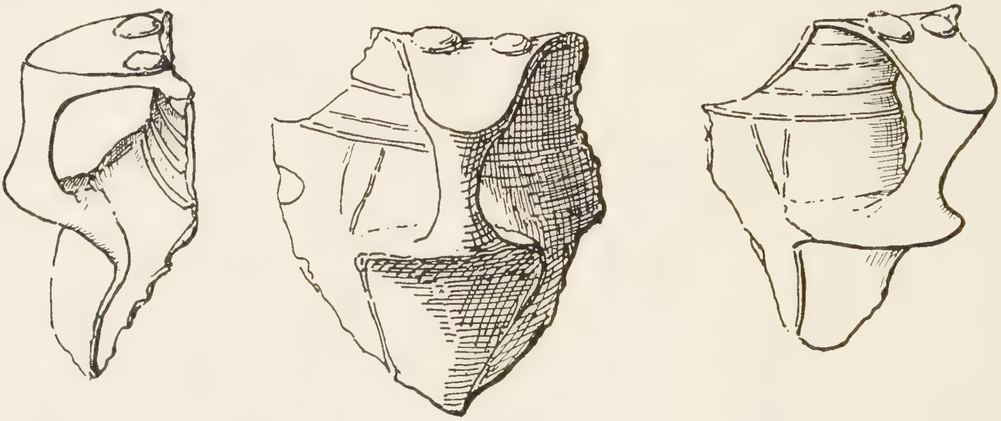

Fig. 121. Fragment of Clay Goblet showing Handle imitated from Metal Form of 'Vapheio' Type: Knossos M. M. III *a*.

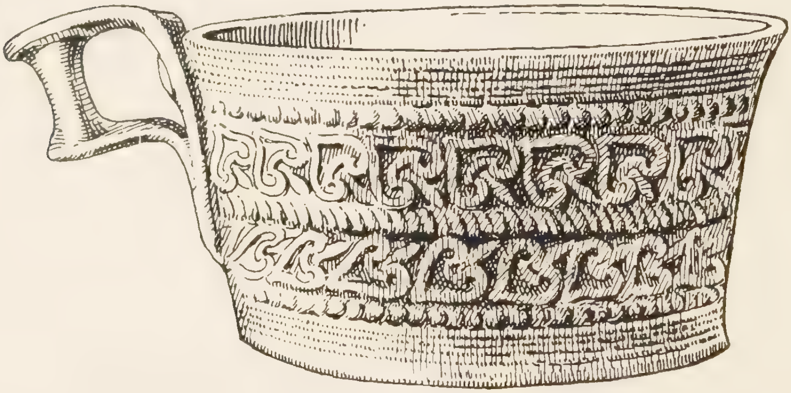

Fig. 122. Bronze Cup of 'Vapheio' Form from Mochlos Tomb.

The shape of the Cups itself is exactly paralleled by the example in veined stone found with L. M. I *a* pottery at Knossos,[2] and by those depicted among the gifts from Keftiu dating from the early part of Thothmes III's reign.[3]

Did the Palace friezes supply model?

That the Vapheio Cup A exhibits these traditional scenes, of which our records go well back into M. M. III, in a somewhat later and more sensational aspect is always possible. But it may well be asked whether the outstanding model from which the artist of the cup as well as the engravers who epitomized such scenes on intaglios drew their inspiration,

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[1] See *P. of M.*, i, p. 243, and Fig. 183 *b*. As already shown (ii, Pt. I, p. 175 and Fig. 89) a Clay Cup from the Nienhagen Cemetery in Silesia belonging to the Early Bronze Age is imitated from the Vapheio type.

[2] *Ibid.*, ii, Pt. I, p. 380, Fig. 212.

[3] *Ibid.*, ii, Pt. II, p. 534, Figs. 337, 338: Tombs of User-Amon and Senmut.

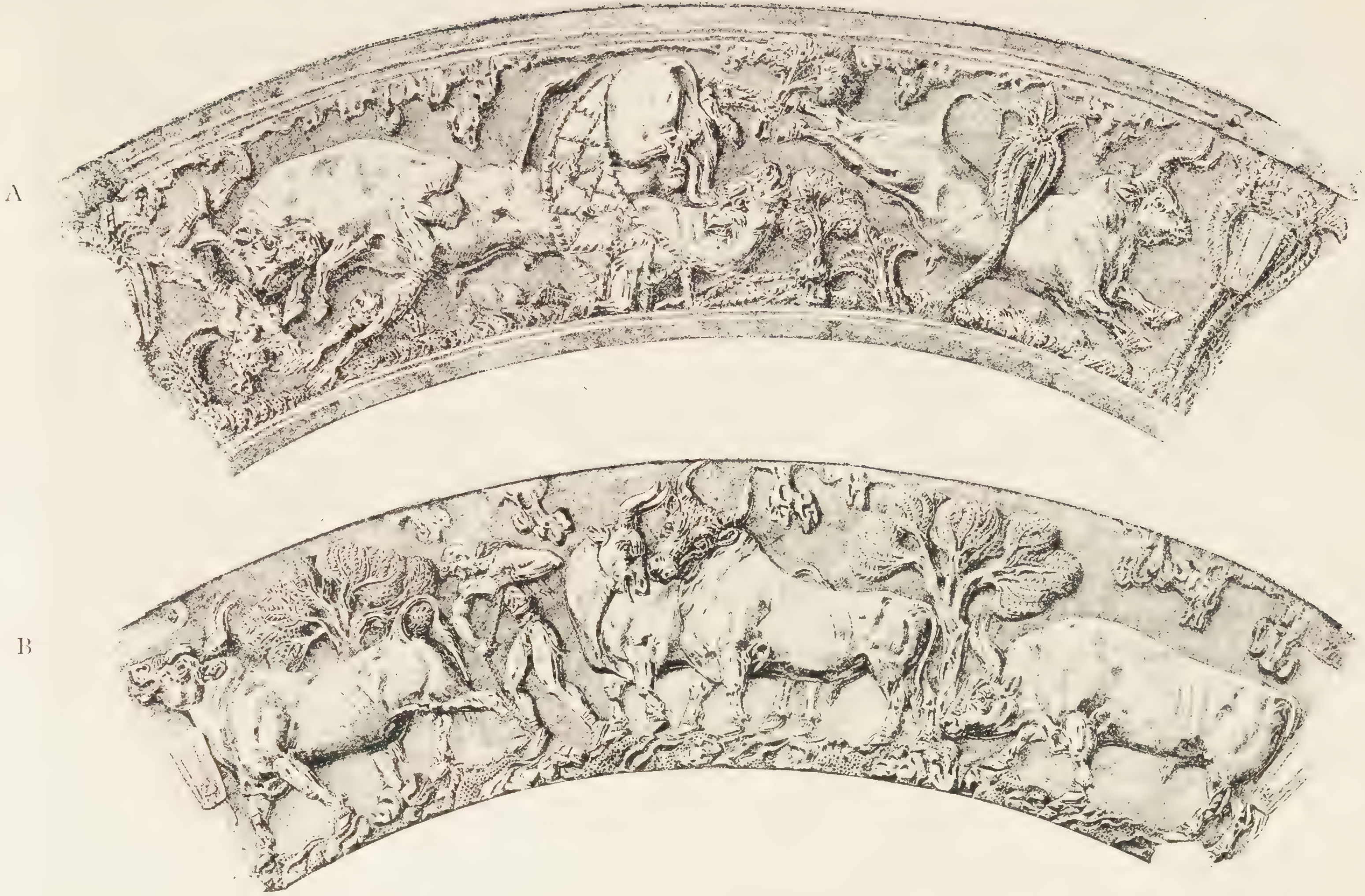

Fig. 123. A and B: Development of Designs on Gold Cups from the Vapheio Tomb.

was not in its main features, at least, supplied by the great series of reliefs set up in conspicuous positions above the Northern Entrance Passage of the Knossian Palace. May not the splendid plastic compositions, of which we have here a fragmentary record, overlooking in a manner the Sea Gate of the great Minoan building, have affected the works of lesser Art as the sculptures of the Parthenon did those of Classical Greece? It seems possible that the structural division into three parts, here traceable, may have conditioned the triple arrangement that seems to have been a permanent feature of these compositions. It will be seen, indeed, that some sculptural fragments from the Elgin Collection, found at Mycenae, once more lead us in an unexpected fashion to the great Palace of Knossos as the main source of these Vapheio groups.[1]

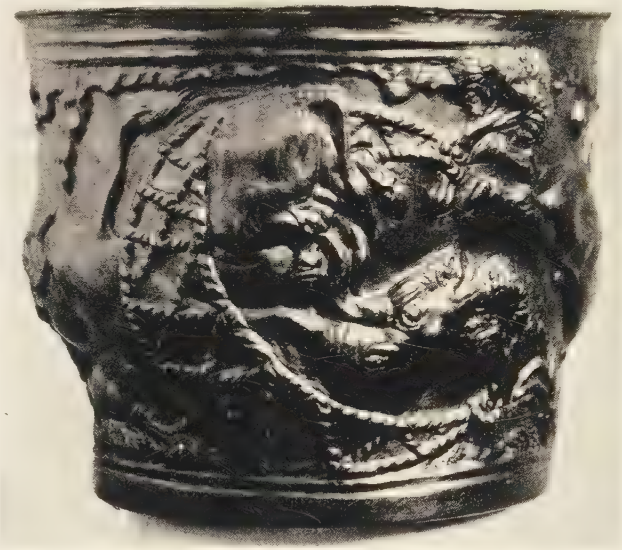

Fig. 124. Bull caught by Net on Vapheio Cup A.

Fragmentary reliefs in Elgin Collection.

The Elgin reliefs, as we shall see, point to two separate groups, one containing a charging and the other a stationary figure of a bull, and this corresponds with the antithetic composition of the two groups depicted on the Vapheio Cups. In one case we see there a bull-hunting scene, in the other, as will be shown below, a scene of capture by means of a decoy cow. Both groups, moreover, divide themselves into three episodes, an arrangement which in the case of the frieze of reliefs above the Western bastions of the Northern Entrance Passage was almost imposed by structural conditions.

Reliefs on the Vapheio Cup A.

The Vapheio reliefs.

A brief description of the designs on the two gold cups from the Vapheio Tomb may be given here (see Fig. 123, A and B).

Cup A: Bull-hunting scene.

The Bull-hunting scene on the Cup[2] A of Fig. 123, presenting the more sensational design, is here reproduced from the fine original drawing of Monsieur E. Gilliéron, père,[1] as well as the tamer subject, centring round a decoy cow, of the companion vessel (B). The photographic views (Figs. 124–127) bring out individual scenes.

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[1] See below, p. 195 seqq.

[2] The original publication of the Vapheio Cups by their discoverer, Ch. Tsountas, appeared in Ἐφ. Ἀρχ., 1889, pp. 129–71, and Pls. VII–X), and a careful technical description by G. Perrot in *Hist. de l'Art*, vi, p. 784 seqq. (see, too, Figs. 369, 370, and Pl. XV).

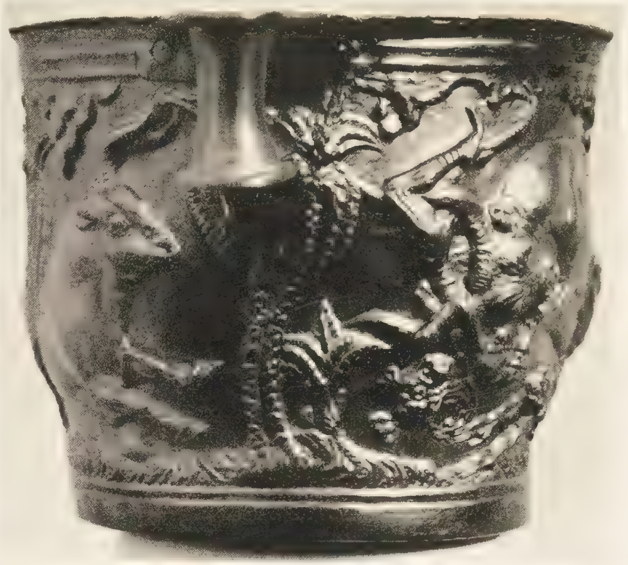

Fig. 125. Girl clinging with Legs and Arms to Bull's Horns. From Vapheio Cup.

The three episodes here grouped together must be regarded as the results of a 'drive' of wild or half-wild bulls along the bottom of some wooded glen with rocky steeps beyond on either side. The animals were thus hurried forward on a kind of 'obstacle race' towards the point where their wild career was checked by a rope cradle stretched across the course between two olive-trees, to the trunks of which the ropes were made fast. The same device in a simpler shape, where only a single rope was used, has been already illustrated by the miniature painting on the crystal plaque.[2]

The object immediately in view was, by checking the headlong rush of the animals, to afford the 'cow-boys', ambushed near the obstacle, an opportunity of showing their acrobatic skill of grappling the bulls. In one case it will be seen that the beast has either turned in time or has cleared the barrier, and is galloping off to the right. The middle scene shows a bull, who, endeavouring too late to turn, has been caught sideways in the cradle and is partly entangled in it[3] (Fig. 124). The bull to the left, however, has either avoided or cleared the rope barrier, and has already given a very good account of one of his assailants. The youth to the right is flung to the ground, his arms thrown behind him like the stricken lion-hunter on the dagger-blade from the Mycenae Shaft-Grave.[4]

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[1] My thanks are due to his son for these reproductions of M. Gilliéron's anastatic drawings. For the fine photographs from which Figs. 125–7 are reproduced I am indebted to the kindness of Prof. G. Karo.

[2] Coloured Plate XIX, and cf. p. 110, Fig. 61.

[3] There is no question of a 'net' in the ordinary sense.

[4] See above, p. 121, Fig. 71, *a*.

Girl grappling bull. The neck-twisting feat.

The other figure is that of a girl. Springing forward from some coign of vantage she has locked both legs and arms round the monster's horns in such a way that it is not in his power to transfix her (Fig. 125). This sudden onslaught, with the full weight thrown on the bull's head, has twisted it half round and threatens to bring him down in full career, if not to break his neck, a feat, we are told,[1] which the Thessalian youths, springing from their ponies, actually performed.

In an analogous motive, not infrequently found on seals and seal-impressions of the early part of the Late Minoan Age, the attempt is made to twist the animal's neck by seizing a horn in one hand and the jaw or nozzle in the other.[2]

The figure on the Vapheio Cup, thus desperately at grips with the horns of the great beast, is certainly that of a girl, in spite of the sinewy limbs that it displays. This fact, not apparently noted in any description of the scene, should be clear to any one intimate with Minoan iconography and who remembers the parallel wall-paintings in which the sex is declared by the white skin colour. In these, as already observed, the 'cow-boy' costume is copied even to the imitation of the male 'sheath',[3] the only distinction being the more elaborate coiffure, at times accompanied by a bright bandeau or ribbon over the forehead. In the present case the luxuriance of the locks is in striking contrast to those of the fallen youth, which have a quite short appearance in front. Here we see a kind of curling fringe above the forehead,[4] while to prevent the exuberance of the tresses behind from becoming an impediment, they are partly bound up into a kind of *chignon*, like the Greek *krobylos*.

In this case the only olive-trees are those to which the cords are bound, while elsewhere we see palm-trees, a sign perhaps of the more open country in which the herd seeks escape.

Design on the Vapheio Cup B.

The subdued movement visible on the other cup (Fig. 123, B, and see Figs. 126, 127) supplies a skilful foil to the sensational subjects of that described above.

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[1] Pliny (*H. N.* viii. 172) relates of the mounted Thessalonian ταυροκαθάπται that they were actually able to kill the bulls in this manner ('cornu intorta cervice tauros necare'). See below, p. 229.

[2] See below, p. 231 and Figs. 162–4.

[3] *P. of M.*, ii, Pt. I, p. 35, and Suppl. Pl. XIII, *e*, and cf. p. 213, Fig. 144 below.

[4] The front border of the hair is often waved in the case of male figures, but the fringe of short curls is a distinctive feature of the women's coiffure, continually repeated in wall-paintings.

Vapheio Cup B: Capture through decoy cow.

The story here depicted is simple enough, though it seems to have been quite inadequately realized by its commentators. Here, too, it divides itself into three successive scenes—answering in this case, as we may well suppose, to the triple division of the terrace of the East Portico at Knossos—and its theme is the capture of a half-wild steer by means of a decoy cow. The successive stages of the capture are really three separate episodes, but these have been woven by the artist into one continuous composition.

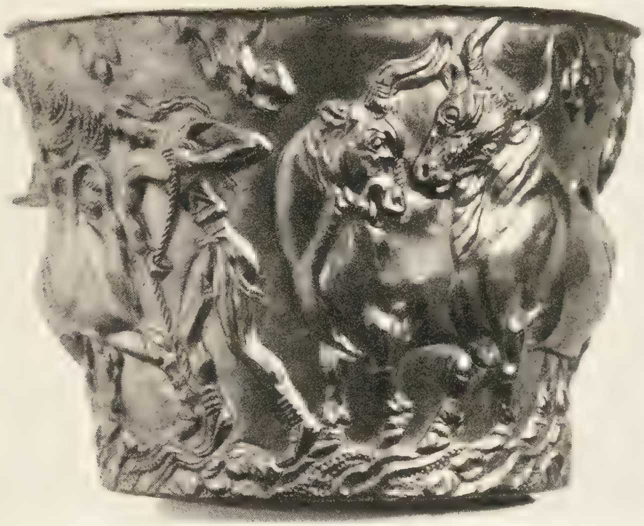

Fig. 126. Vapheio Cup B: showing Bull and Cow in Amorous Conversation.

In the first scene the bull is depicted nosing the cow's trail; in the second his treacherous companion engages him in amorous converse, of which her raised tail shows the sexual reaction.[1] The extraordinarily human expressiveness of the two heads as they turn to one another is very characteristic of the Minoan artistic spirit, and quite foreign, as regards animals, to monumental Greek Art. It is nearer to Sir Edwin Landseer.

In the third scene the herdsman takes advantage of this dalliance to lasso the mighty beast by his hind leg. The bull is seen with his head raised, bellowing with impotent rage:

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[1] The identification of the animal whose sex is concealed with a decoy cow, and the consequent explanation of the whole scene, was made by me in 1906, when I procured two of M. Gilliéron's facsimiles of the cups for the Ashmolean Museum. It was referred to by me at that time in a public lecture in the Museum and set forth in the printed label and MS. catalogue. Ten years later an interesting observation made by Geheimrat Rudolph Lipschke of Bonn and published by Dr. A. Körte (*Jahreshefte d. Oesterr. Arch. Inst.*, ix (1906), pp. 294, 295) confirmed the central fact on which this conclusion hinged. He observed that the raising of the farther animal's tail in the middle scene answers in fact to a physical sign of sexual inclination regularly shown by the cow in such cases. The sex of the animal (otherwise clearly indicated by the bull's action) is thus determined. Dr. Körte, in view of this, proposed an explanation somewhat parallel to my own. Instead of recognizing a continuous group, however, he saw three separate bulls in a single scene, a view that would destroy the whole dramatic *ensemble*.

> ὣς, ὅτε ταῦρος
> ἤρυγεν ἑλκόμενος Ἑλικώνιον ἀμφὶ ἄνακτα
> κούρων ἑλκόντων.[1]

It may be here observed that the Homeric picture cited in this passage of the dragged bull roaring as the young men drag him to the altar, receives a fresh illustration in a variant form from the relief on a fragment of a steatite 'rhyton'[2] found some time since North-West of the site of the Knossian Palace. It is here a he-goat that, despite his struggles, is dragged by a sturdy youth, probably to a similar destination. Beneath is seen a good specimen of a Minoan helmet, with a curious curved crest and apparently set with sections of boars' tusks (Fig. 128).

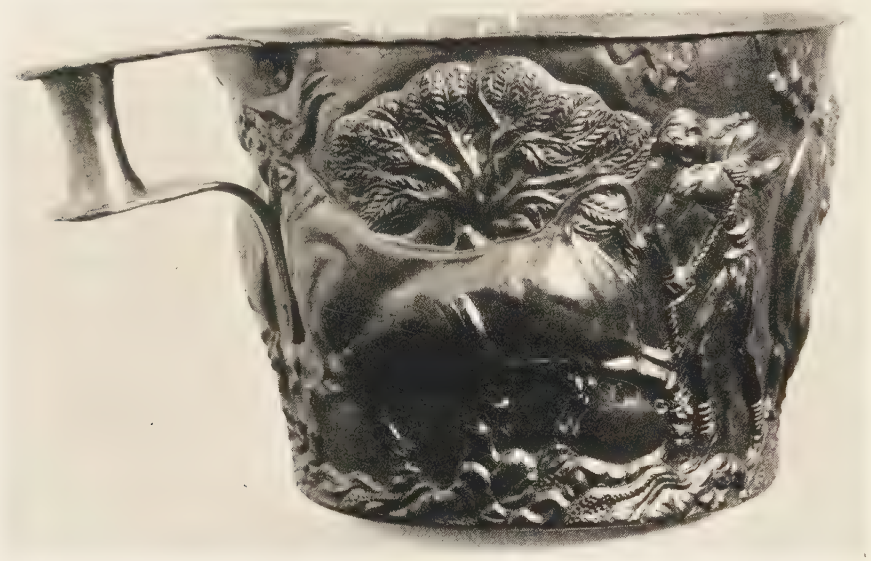

FIG. 127. VAPHEIO CUP B (SHOWING LASSOING OF BULL).

Single bull repeated, not three as supposed.

It is clear that on the Cup we must see not three separate animals, but rather a single bull thrice repeated, and the olive-tree itself seems to be the same. One scene is run into another, and, from obvious decorative considerations, the whole becomes a continuous toreutic work. But on the Palace walls the different episodes would have been enclosed in consecutive panels, and the triple arrangement of the bastions underlying the two porticoes at Knossos, where we venture to see the great outstanding archetypes of such compositions, had existed from an early date.

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[1] *Iliad* xx. 403–5.

[2] In the Ashmolean Museum, Oxford.

Evidences of Artistic Cycle, supplied by Gem-types.

Evidences of artistic cycle.

Bull-grappling and bull-catching subjects, in which 'cow-boys'—both male and female—took part in the wilds, seem to have formed a favourite theme of wall-decoration from at least the earlier phase of M. M. III onwards. The closely related group, too, in which the set acrobatic performances of the 'bull-ring' are depicted was illustrated, as we shall see, on the Palace walls of Knossos at least as early as the First Late Minoan Period. Many variations of these scenes of the *taurokathapsia* were thus betimes taken over from the greater art of painted stucco reliefs or from fresco designs on the flat on to works of the lesser Art, such as the reliefs on vases or the intaglios on gems and signet-rings.

On vases and gems.

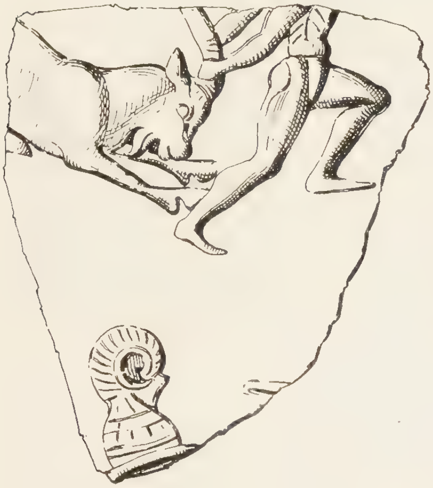

Fig. 128. Fragment of Dark Green Steatite 'Rhyton'. ($\frac{3}{2}$)

Such a subject, of which we do not possess the plastic original, is to be seen in the exquisitely engraved design—here reproduced from an enlarged photographic copy of the cast—in Fig. 129, on a 'flattened cylinder' of onyx, not later, certainly, than M. M. III, and displaying the finest combination of powerful execution with minute detail to be found, perhaps, in the whole range of the Minoan gem-engraver's Art. In this case a cow-boy takes advantage of a huge bull drinking at a tank to spring down on him and grapple his neck and forelegs.[1] Such a feat would have involved almost superhuman strength, but the Minoan artist, while giving full play to his extraordinary skill in the portrayal of the noble beast, has rendered the performer quite disproportionately small.

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[1] A. E. Coll., once Tyskiewicz; see *P. of M.*, i, p. 377, Fig. 274, and cf. Furtwängler, *Antike Gemmen*, Pl. VI, 9, and vol. ii, p. 26. The remarkable parallel presented by the trellis-work of the tank with the painted plaster panels on two bays of the Central Court of the Phaestos Palace has been pointed out by me in Vol. i of this work (cf. p. 373, Fig. 271, and pp. 376, 377). But the trellis pattern, though of woodwork origin, is in this case used as a decoration of a solid field of masonry. There is no warrant for Dr. H. R. Hall's suggestion (*The Civilization of Greece in the Bronze Age: the Rhind Lectures*, 1923, p. 187) that the object in front of the bull is 'a hurdle of withies'. My interpretation of a tank, at which the bull is drinking, had occurred independently to Furtwängler (*A. G.*, ii, p. 26), 'Es ist vielleicht ein grosser Brunnentrog gemeint. Das dürstende Thier wird, während es zu saufen

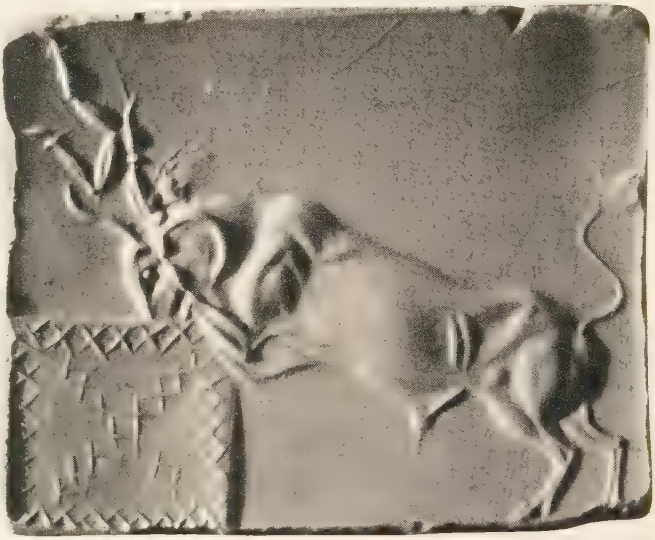

Fig. 129. Bull grappled by Man while drinking at Cistern; on Flattened Cylinder of Onyx. ($\frac{3}{1}$)

Limitations of intaglio technique.

Apart from the greater interest that the engraver seems to have taken in animal representations—which was generally the case—the reason for the extreme disproportion of the human figure in this case may doubtless be found in the different space conditions within which his work was confined. In the original stucco relief that we may suppose to have suggested this design a considerable wall-space was available above, in which to supply an adequate rendering of the legs and body of the leaping youth, whose downward plunge is shown by his upward streaming locks.

This masterpiece of the Minoan gem-engraver's skill in which, while the full proportions of the bull are reproduced with all their sinewy details, the principal actor in the scene is deliberately stunted, is in fact of great value as pointing to the source of the whole design in a work of the larger Art. For its full development the oblong field should have been stood on end with the major axis perpendicular, but this would have unduly reduced the figure of the bull. The normal height of the walls of the Palace Halls and Corridors at Knossos is somewhat over four metres, which would have left a space of quite two metres above the bull's head for the leaping youth.

Similar limitations of space, with conventional abbreviations resulting from them, may be traced in many intaglio types based on more spacious models. To this must be added, moreover, the general economy both of

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beginnt, von einem Manne überrascht'. So far from being 'in the act of leaping the boundary hurdles', the bull's hind legs are stationary, and the man is not tossed up but, as his streaming locks show, descends.

figures and details that marks the Minoan gem-engraver's craft[1] in the same way that it does that of the best Hellenic period. Such designs, indeed, are not only epitomes of larger compositions, but are often isolated excerpts, the original context of which cannot be always supplied. To this, too, must be added the natural slight variation of type due to the idiosyncrasy of the individual artist and, in the case of signets, a requisite of his profession.

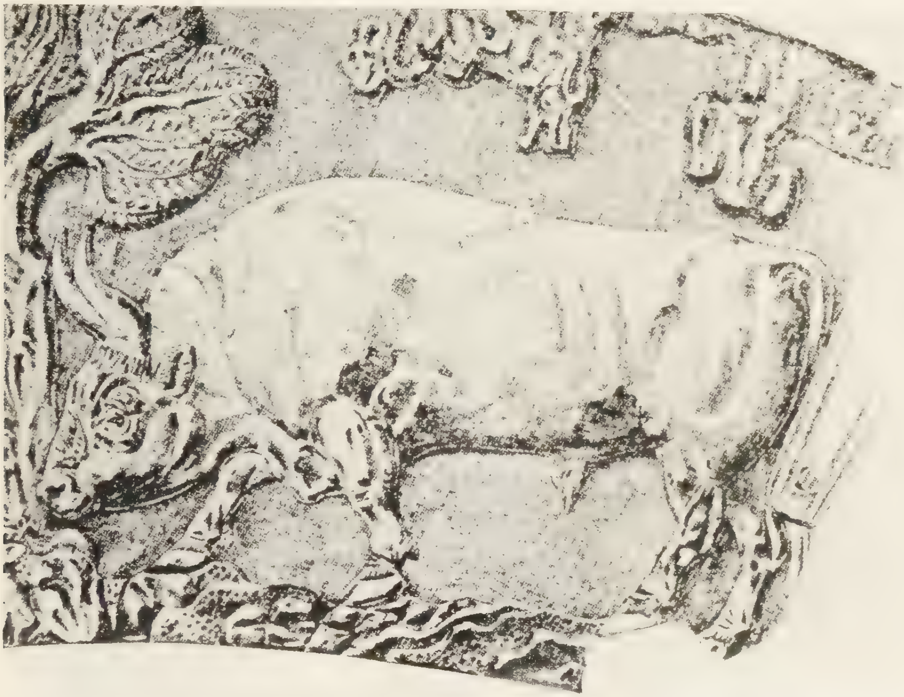

FIG. 130. BULL NOSING TRAIL OF COW. VAPHEIO CUP B.

The incident of the leaper trying to twist the bull's head, repeated in several types illustrated below,[2] supplies at most an analogy to that in which the female 'cow-boy' plays so daring a part on the Vapheio Cup A. The charging bull to the right of that design, though resembling that seen on several seal-types, is in those cases generally associated with a human acrobatic figure in the field above. On the other hand, the bull attempting, too late, to turn and violently bundled back by the rope cradle, as seen in the central scene, which may be said to lend itself to the conditions of the field of lentoid bead-seals, seems certainly to have left its impress in a not uncommon class of contorted designs on Late Minoan gems where, however, the rope cradle itself is omitted.

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[1] On the bezels of the gold signet-rings which, owing to their less bossed surface and the softer material, gave greater facilities for minute engraving, a much more pictorial style is seen. The desire for reproducing entire religious scenes could there be gratified. These picturesque compositions welcome such adjuncts to the field as flowers and foliage, and the number of figures is proportionately much greater than on the engraved gems. On the 'Ring of Nestor' there are no less than fourteen (see above, p. 145 seqq.).

[2] See below, p. 231, Figs. 162–4.

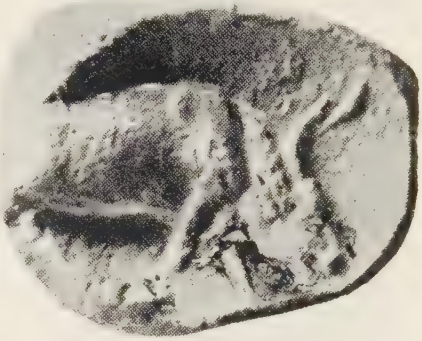

Fig. 131. Clay Sealing from Zakro showing Bull nosing Cow's Trail. ($\frac{3}{1}$)

Bull on seal-impressions nosing trail, as on Cup B.

The composition on the Vapheio Cup B, showing the decoy scene, which has been hitherto left out of account in such comparisons, also finds some remarkable parallels in Minoan intaglio types. One of the later Zakro seal-impressions—others of which illustrate the more exciting scenes of the *taurokathapsia*—gives, in fact, a very faithful rendering of the first episode, consisting of the more peaceful group in which the bull makes his appearance with his head lowered, nosing the cow's trail (Fig. 131, and cf. Fig. 123, b). An alternative rendering of this, in which the bull walks to the right with his head somewhat more raised, is seen on two of the sealings from Hagia Triada.[1] The agate lentoid[2] (Fig. 132) presents, on the other hand, in a sketchy style, a variant version of the lassoing scene. This intaglio is itself an interesting illustration of the gem-engraver's method. Were it not for the fact that it has started running we might suppose that the cow from the preceding scene on the Cup, with its head still turned back and tail erect, as it was during its converse with the bull, were here repeated! The man behind the bull seems

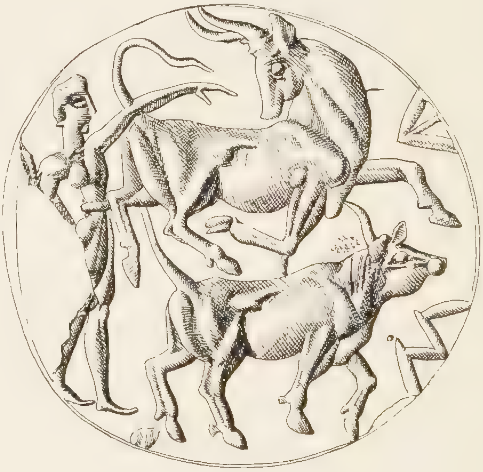

Fig. 132. Man lassoing Bull on Agate Lentoid.

Lassoing scene on gem.

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[1] Halbherr, *Mon. Ant.*, vol. xiii, Pl. V, line 4, no. 2, and p. 36, no. 14.

[2] In my own Collection. Bought at Athens in 1926, and said to have been found in the Peloponnese.

to be in the act of throwing the lasso, which itself is not seen, but the bull's off hind leg is drawn slightly back—much as we see it on the Cup—as if it were already in its coils.

Early Date of Plastic Prototypes of Bull-grappling Scenes on Palace Walls.

Early examples of scenes of *Taurokathapsia* at Knossos.

It is clear that some of the designs thus excerpted and epitomized by the gem-engraver's Art, such as the seal-types referred to from Zakro, go back at least to the closing phase of M. M. III. It follows from this that the plastic compositions from which, *ex hypothesi*, they were taken go back to the same or even an earlier epoch. Evidence, indeed, is actually forthcoming that such works were in existence by the close of the Second Middle Minoan Period. Remains of painted reliefs of bulls, accompanied by fragments of human figures, were found with the 'Spiral Fresco', derived from an earlier 'East Hall' of Knossos.[1] Fragments of the throat and part of the jaw of the painted plaster head of a bull, somewhat under life-size, but otherwise greatly resembling, even in the folds of the dewlap, the relief from the Northern Entrance Passage, came to light in the 'House of the Sacrificed Oxen' in a mature M. M. III deposit,[2] and itself may well belong to the earlier phase, *a*, of that Period. These similarities of style and detail have, indeed, a special interest as tending to show that the same incident of the *taurokathapsia* had been illustrated on a smaller scale at the South-East Corner of the Palace.

M. M. III date of painted reliefs from N. Entrance Passage.

With regard to the dating of the bastions supporting the Porticoes on either side of the Northern Entrance Passage we have, as noticed above, some very sure data. They form an integral part of a group of structures that include the North-West Portico and entrance system and the Lustral Basin and 'Initiatory Area' beyond, while both the deposits found in the latter region and the character of the incised signs on the blocks are of M. M. III *a* date. The Northern Entrance Passage itself, lying like the Domestic Quarter in a cutting in the slope, was favourably disposed for preserving elements of continuity, and there seems, on the face of it, to be no objection to the view that the painted plaster reliefs on the back walls of the Porticoes may date back to the earlier phase of the Third Middle Minoan Period.[3]

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[1] *P. of M.*, i, pp. 375, 376, and Fig. 273, and cf. Vol. ii, Pt. I, p. 355.

[2] *Ibid.*, ii, Pt. I, p. 310. The remains of wall-paintings as a rule go back to an earlier date than the associated deposit from floors.

[3] This view seems preferable to that given in Vol. ii, Pt. I, p. 356, where I had referred these works to the post-seismic M. M. III phase, as seen in the Restored Palace.

It has been already noted that such characteristic features as the varying hues of the olive leaves already occur on M. M. II *b* polychrome ware, and to this must be added the similar rendering of the budding flower as well as the asterisk-like appearance of those intended to be shown full blown (Fig. 110).[1]

Late Preservation *in situ* of Bull-grappling Reliefs of N. Entrance Passage.

Relatively late date of stratum with bull reliefs.

We have seen[2] that the painted stucco fragments of bull-grappling scenes brought to light along the West side of the Northern Entrance Passage at Knossos had been deposited on an old surface-level roughly following—at a depth of about a metre and a half—the slope of the hill-side as it existed before the excavation (see Section opp. p. 171, Fig. 114). At the same time the archaeological horizon that marked these deposits was itself from 50 centimetres to 1·50 metres above a well-defined L. M. III surface-level belonging to the Reoccupation Period of the building.

Part of reliefs seen in position by Greeks.

This stratigraphic evidence, as given above, may be thought to be conclusive as showing that the relief fragments had found their way to the level on which they lay at a date when the early Greek settlement, immediately North of this, was already in existence.

On the L. M. III surface, averaging a depth of about a metre below this—though remains of a gypsum chest with tablets of Class B (L. M. II) had been precipitated on to it, apparently from some upper floor—no single piece of the painted stucco frieze was discovered. Up to the time to which the later surface-level belonged we may assume that it was still largely intact. The fragments there found, indeed, represented only a fractional part of the whole composition, of which they were for a great extent the *disjecta membra*, thrown aside out of their context. It is noteworthy, however, that, in contrast to this general dislocation, the two large fragments of olive-trees, found respectively by the two ends of the Portico, presented part of the outer border-lines of two panels as well as of their upper margins. From this it appears, not only that they stood in a close relation to their original position on the back wall, but that in all probability some part of the roof of the gallery was still in position.

The olive-tree reliefs at two extremities.

Parallel survival of North-West Portico.

From the organic connexion of this structure with those of the area immediately West, we may even infer that remains of the adjoining North-West Portico and Entrance still rose above the ground-level—the unblocked doorway of the latter opening on the winding ramp-passage that ascended between it and the buildings superposed on the Early Keep. Its deep-walled pits, indeed, that might have called up visions of fearsome dungeons, had been long since filled in and built over, but much more of the great Palace Sanctuary was visible at that epoch to the strangers approaching it from the North than the modern world had any conception of previous to the excavations. At the time when they began it was as yet a bare hill-side.

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[1] See, too, *P. of M.*, i, p. 263, and Fig. 194, *g*, from which Fig. 112 is reproduced.

[2] See above, p. 171 seqq.

Influences of remains on imagination of Hellenic settlers.

It kindles the imagination when we realize that not only this old N.W. entrance, with its labyrinthine suggestions, was still visible in part of its height at least, but that much of the bull-grappling scenes still stood forth on the neighbouring Portico overlooking the Sea Gate. Not the head alone of the great 'Urus' bull that to-day excites general admiration, but its whole body in all its brilliant colouring, together with part at least of the scene to which it belonged, would have daily met the eye of the Greek new-comers. They may well have been onlookers of some companion piece—such as that of which we have a record on the embossed cup—where the girl is seen at mortal grips between the horns of another monstrous beast. What other works of the Minoan Daedalos may not then have been still preserved within the Palace walls we can never know, but one or other of the full-sized female figures in rich attire that existed in the area within the North-Western Entrance[1] may well have kept its place on the wall to call forth a vision of Ariadnê.

So much, however, may be safely said. In all future speculations regarding the fabulous lore that grew up round the site of Knossos strict account must be taken, not only of the considerable remains of the 'House of Minos' as they existed in early Greek days, but of the artistic creations on its walls.

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[1] See above, p. 45, Fig. 27.

§ 76. PARALLELS SUPPLIED BY BULL-RELIEFS IN ELGIN COLLECTION FROM THE 'ATREUS' TOMB AT MYCENAE.

Two contrasted groups of bull-catching scenes on Vapheio Cups and gems; Originate in Palace friezes; Fragmentary reliefs in Elgin Collection—material proves to be Knossian gypsum; Found in front of 'Atreus' façade; Supposed lion, a bull; Bull's head resembles Knossian; Olive-tree also introduced—from similar bull-hunting scene; Slab with stationary bull—answers to Vapheio Cup B; Elgin slabs from similar contrasted compositions; Probably executed at Mycenae, by Minoan artist; Friezes, not tympanum reliefs; Were they from side-walls of 'Atreus' dromos? Possible existence of fore-hall to tomb; Signs of restoration of dromos; Re-used lintel-block, perhaps of entrance to fore-hall.

Two contrasted groups of bull-catching scenes on Vapheio cups and gems.

THE evidence of two contrasted groups of bull-catching scenes—in the one case of a wild hunt, in the other of the more leisurely episodes of capture by means of a decoy cow, so fully supplied by the Vapheio Cups and reflected in a more abbreviated form on a whole series of intaglio types itself, as already observed must be taken to point to pre-existing models in the larger Art. Of such we may now actually recognize the remains in what has been preserved to us of the painted friezes from the porticoes on either side of the Northern Entrance passage at Knossos, going back in all probability to the early part of the Third Middle Minoan Period. There are, indeed, some indications that low reliefs in painted stucco of this class already existed in the preceding phase of the Great Palace.

Originate in Great Palace friezes.

Fragmentary reliefs in Elgin Collection.

Materia proves to be Knossian gypsum.

A suggestive pendant to this Knossian group is to be recognized in two fragmentary reliefs from the 'Atreus' Tomb at Mycenae brought home by Lord Elgin and now in the British Museum. An interesting feature of these, moreover, recently brought to notice brings them into a direct line of connexion with Minoan Crete. Their material has been generally regarded as limestone, but some abnormal appearances noted by Mr. E. J. Forsdyke, of the Department of Antiquities, led to a chemical analysis of the stone which proved in fact to be identical with the gypsum rock so largely used in the structure of the Knossian Palace and which is so abundantly forthcoming in the neighbouring hill of Gypsàdes.[1] There, indeed, as already mentioned, are visible the openings of large subterranean quarries. Although deposits of this material extend inland across the whole Central zone of the Island there can be little doubt that Knossos itself was the source of these as of other blocks of this material already known both at Mycenae and Tiryns.[1] In the present case this conclusion will be seen to be of far-reaching significance.

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[1] Some years previously Dr. H. R. Hall had already expressed the opinion that the material was 'grey gypsum'.

Found in front of 'Atreus' façade.

Photographic copies of the sculptured reliefs on the two fragmentary slabs in question are shown in Figs. 133, 136. Thanks to the careful re-examination of the evidence by Mr. F. N. Pryce for the new Catalogue of Sculptures in the British Museum[2] it is now clearly ascertained that both these slabs belonged to the series of fragments presented by Lord Elgin to the British Museum as the result, it would seem, of the excavations carried out on his behalf in front of the façade of the 'Atreus' or, as it was known to him, the 'Agamemnon' Tomb.[3]

Supposed lion—a bull.

That the two legs of the stationary subject shown in Fig. 136, are those of a bovine animal is clear enough, but the other figure set up on its broken edge, as if it belonged to a rampant beast, gave rise to a curious misconception. It was in fact described both in the original Catalogue of the B.M. Sculptures[4] following Dr. A. S. Murray,[5] and by Monsieur Perrot in his

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[1] The Cretan origin of these was noted by Dörpfeld, *Ath. Mitth.*, xxx (1905), p. 288.

[2] Vol. i, Pt. I, *Prehellenic and Early Greek Sculpture*, p. 14 seqq. The photographs from which Figs. 133, 136 were taken were kindly supplied me by Mr. F. N. Pryce. He observes in connexion with these sculptured slabs (p. 14) that the proposal to assign the date of the Treasury to *c.* 1400 B.C.—or, rather, considerably later—must be definitely discarded. He accepts my view that they are of the M. M. III Period.

[3] *Op. cit.*, pp. 16, 27. These two slabs seem to have been found by 'Mr. Vlassopoulo of Argos' in the course of his excavations for Lord Elgin at 'the Tomb of Agamemnon', and had apparently been removed from there early in 1906, before Leake's visit. They were unquestionably the two unlabelled slabs shipped in the *Braakel* from Piraeus in 1806. I called attention to this new evidence in a communication made at the Annual Meeting of the British School at Athens on Nov. 6, 1928 (see Report in *The Times* and *Manchester Guardian* of Nov. 7). A fuller discussion of the subject has since appeared in my monograph on the *Shaft Graves of Mycenae* (Macmillans, 1929), to be reproduced at the end of this work. To avoid repetition, however, I have incorporated in this section the part of that work which relates to the Elgin slabs. In the course of some friendly criticisms by Professor W. R. Lethaby in the *Builder* (May 31, 1929) objection is made to the inference that these slabs were found in the entrance area or in front of the façade of the Tomb. He suggests that they may have been found inside the Tomb and belong to the inner chamber. But, as Mr. E. J. Forsdyke points out, there is no record of anything having been found by Elgin's agent, Vlassopoulo, inside. That the inside, indeed, was not thoroughly cleared by him appears from Leake, *Travels in the Morea*, ii, p. 373. He 'observes that there only wants a little labour to complete Lord Elgin's excavation, and to show the depth and nature of the monument within' (March 17, 1806).

[4] *B. M. Catalogue of Sculpture* (1st ed., 1892), vol. i, no. 5.

[5] *History of Greek Sculpture* (2nd ed. 1890), vol. i, p. 61.

'History of Ancient Art'[1] as the head of a lion. The section of the horizontal top border of the slab was at the same time mistaken for the oblique line of the left side of a *tympanum*, the relief itself being regarded as part of an 'antithetic' pair of animals resembling that of the Lions' Gate.

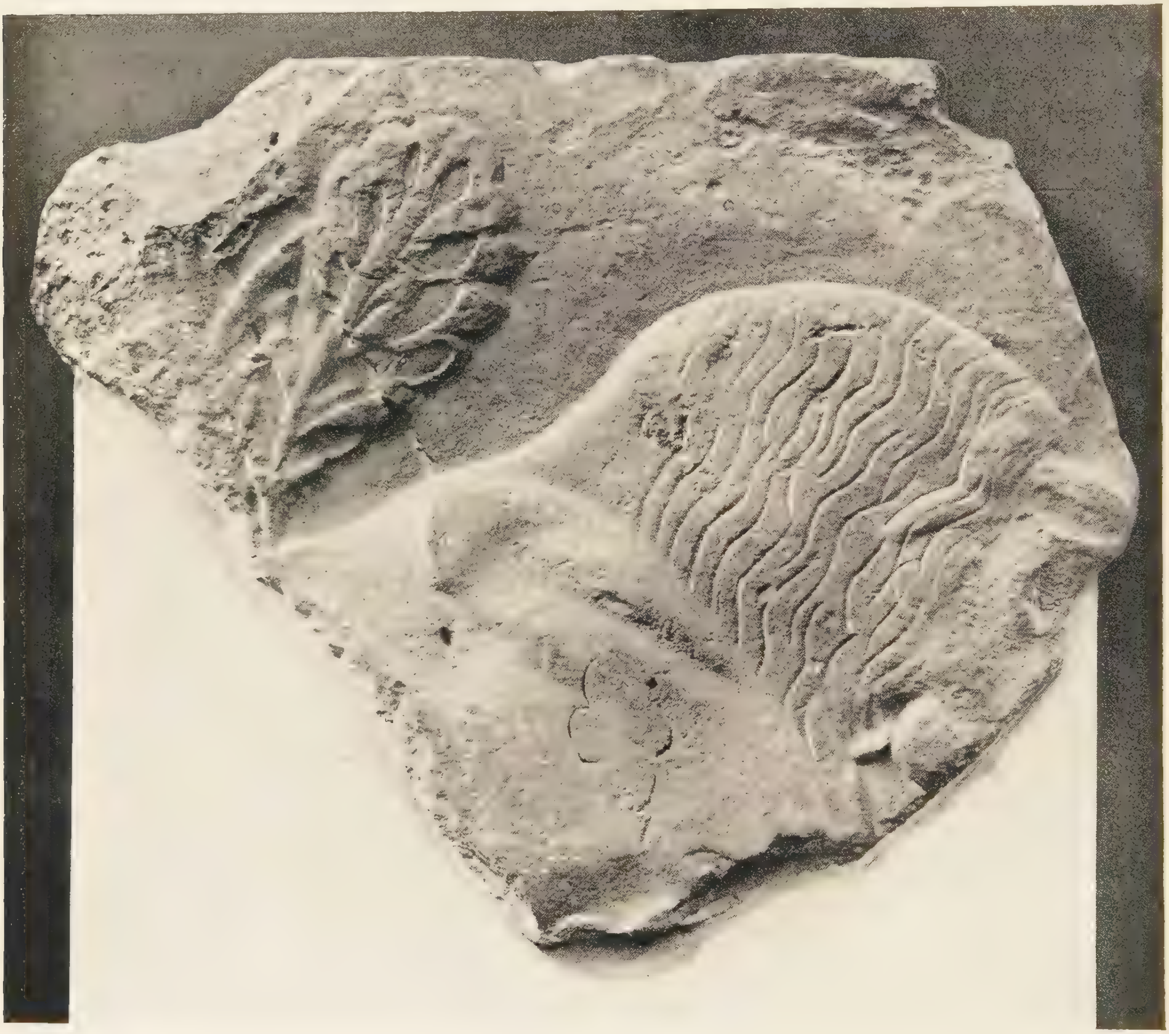

FIG. 133. PART OF RELIEF OF CHARGING BULL WITH OLIVE-TREE BEHIND; FROM OUTSIDE 'ATREUS' FAÇADE, MYCENAE. ELGIN COLL., BRITISH MUSEUM.

It was Professor Friedrich Hauser[2] who in 1894 pointed out both the true character of the sculpture and the original position of the fragment, in accordance with which it was remounted in the Museum by Dr. Murray. The sculptured remains, as is best shown by the restoration executed for me by Monsieur Gilliéron in Fig. 135 on the Vapheio analogy, belong to a galloping bull, in this case with a lowered head. The front of the bull's nose, a small part of the eye and the forehead, are wanting on the relief, but the bovine character of the animal is clearly shown not only by the wavy mane—quite unlike the pointed locks of the lion in Minoan Art—but by the conventional quatrefoil spots which recall the regular inlays of that shape on bull's-head 'rhytons'.[1] These are reminiscent on the one hand of the stellar markings of Hathor's Cow,[2] and on the other hand of the much earlier inlays of Chaldaean vessels in the form of bulls.[3]

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[1] *Histoire de l'Art*, vi, p. 646 and Fig. 291. 'L'un de ces morceaux, par le ligne oblique que présente un de ses côtés, s'annonce comme ayant dû faire partie de dalles que bouchait le vide triangulaire. On y voit à droite, ciselées en faible relief, la tête et l'épaule d'un lion.'

[2] *Jahrbuch d. k. d. Arch. Inst.*, ix, p. 54 seqq.

Bull's head resembles Knossian.

What is of special interest is the remarkable correspondence between the bull's head of the Mycenae slab—which can indeed be restored with great completeness—and the example (here repeated in Fig. 134) from the Northern Entrance Passage of the Knossian Palace. As is now generally recognized, owing to the folds of the dewlap, the painted stucco head is in a lowered position as of a charging animal, its angle, as shown in Fig. 116 above, almost exactly answering to that of the Mycenae relief, though the jaw there is pressed to the chest.[4] The gypsum relief is somewhat less than half the scale of the other, which is of full natural proportions—a great bull of the Urus breed—, but the style is closely similar.[5] The bull's ear is cocked forward in the same way and, here too, the tongue protrudes from the mouth. In this case, too, we have the head of a charging bull.[6] Although the relief on the gypsum slab is proportionally lower than that of the painted plaster head—notably in the case of the ear, which there is executed as if it were part of a figure in the round—the style as a whole shows a distinct correspondence and reflects the finest period of Minoan glyptic Art.

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[1] Compare the fragment a bull's-head rhyton in limestone from the Atreus Tomb at Mycenae (A. E., *Shaft-Graves of Mycenae*, Macmillans, 1929, Figs. 62, 63), and the quatrefoil inlays from a steatite rhyton found in the Tomb of the Double Axes (*Archaeologia*, 1913). Hauser (*op. cit.*, p. 55) rightly compares the quadruple curves and spots on the bull of the Tiryns fresco.

[2] See *P. of M.*, i, p. 513, and Fig. 370, A, B, C.

[3] *P. of M.*, ii, Pt. I, pp. 260–4, Fig. 156.

[4] See Lethaby, *loc. cit.*

[5] The distance from immediately behind the ear to the tip of the nose was in the case of the painted plaster relief 64 centimetres (see above, p. 172). In the case of the gypsum relief the same measurement, allowing for a slight break at the tip of the nose, is about 28 cm.

[6] Professor Lethaby (*loc. cit.*) objects that a charging bull would 'require a picturesque ground below' (such as that suggested in Fig. 135 by Monsieur Gilliéron), whereas in the case of Fig. 136 we see a plain ground. But his comparison (*loc. cit.*, Fig. 2) with the ambling bull on the Enkomi Casket (*B. M. Excavations in Cyprus*) takes us to a very different Age.

We may reasonably conclude that the Mycenae bull belonged to a composition similar to that from the Western Gallery of the Northern Entrance at Knossos. The Vapheio type brought into comparison is divergent, showing the head more raised while the ear is in that case turned back.

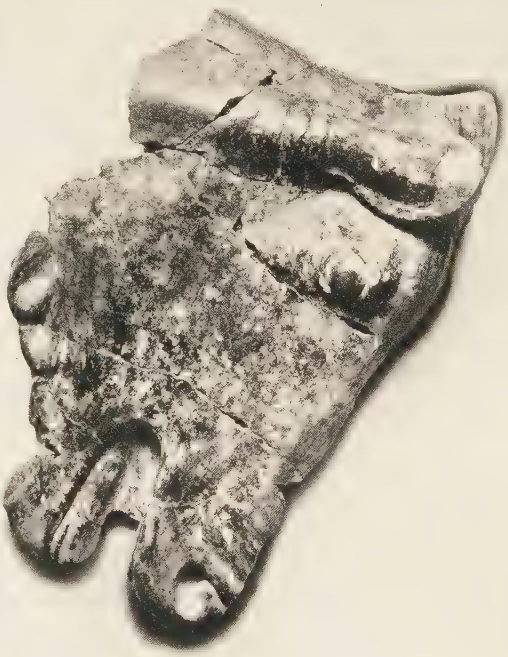

Fig. 134. Painted Stucco Relief of Head of Charging Bull, E. Portico of N. Entrance, Knossos.

From similar bull-hunting scene.

Yet both are galloping bulls and it is possible that both animals belong to variant types of the same scene. The branches of the olive-tree which in the case of the Mycenae relief rise behind the bull's back themselves find a close analogy with remains of similar trees associated with the Knossian frieze. The galloping bull on the Vapheio Cup A shows a palm-tree rising in front of the animal's flank.

Olive-tree also introduced.

The methods in the present case adopted for the delineation of the olive branches are new, however, and of exceptional interest. The exterior outline of the foliage is in part naturalistically drawn, showing the outline of individual leaves, with traces of their central veins. The inner leaves on the other hand are hollowed out evidently to receive some kind of inlay, not improbably *kyanos* or smalt. That the whole relief, in conformity with the gay Minoan taste, was originally covered with a coloured wash there can be little doubt, so that the varied tints of the olive foliage might have been reproduced, what may well have been bright green outer sprays thus contrasting with the azure inner foliage. The natural and varied detail here visible must be regarded as indications of an early date. Decadent indeed by comparison are the conventional balloon-shaped trees that we meet with, for instance, on the hunting frieze of the later Palace at Tiryns.[1]

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[1] Rodenwaldt, *Tiryns*, ii, p. 98, Fig. 40; cf. Pl. XII.

It is a highly significant fact that the fellow slab, Fig. 137, showing two forelegs of a stationary animal, stands to the fore-part of the galloping bull on the other in the same contrasted relation in which the subject of the Vapheio Cup B stands to A. In this case, moreover, the two bovine legs—the hinder set straight down, the front leg a little advanced with the knee very slightly bent—correspond in a remarkably close manner with the forelegs of the decoy cow on Vase B. It is completed as such in Fig. 137.

Slab with stationary bull.

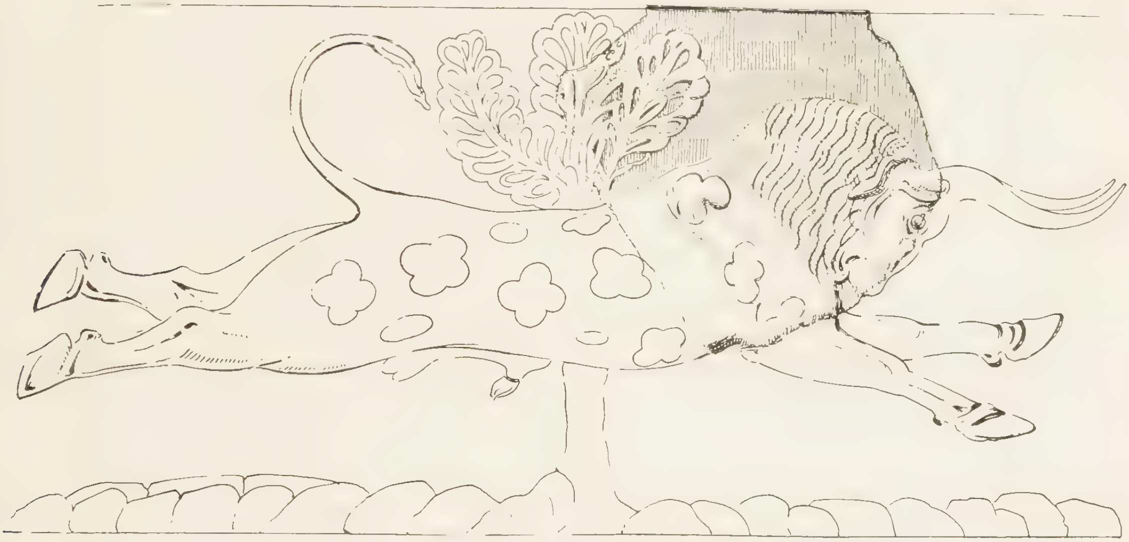

Fig. 135. Charging Bull, completed from Relief on Gypsum Slab found outside 'Atreus' Façade, Mycenae.

Answers to Vapheio Cup B.

One difference, indeed, we notice of a structural kind befitting stonework. The waved outline of conventional rocks is wanting and the hoofs are set, instead, on a square-cut plinth. In the restoration of the relief of the galloping bull, Fig. 135, rocks, indeed, of a convenient kind have been introduced in the foreground, as analogy would suggest. But it seems probable that there was, as in the parallel relief, a plain architectural base, though the painted wash that doubtless covered the stone background may well have expressed such features.

Otherwise, so far as it has been preserved, the forelegs and lower body-line of this bovine figure exactly correspond, as we have seen, with those of the bull in amorous converse with his treacherous consort that forms the central subject of the Vapheio Cup B. On the other hand, the fact that the companion relief may be regarded as an excerpt from a sensational composition resembling that from the West side of the Northern

Elgin slabs from similar contrasted compositions.

Entrance Passage lends additional probability to the view that they were faced in the opposite gallery by a similar series of decoy scenes.

The comparisons that they evoke harmonize with the conclusion that the reliefs on the gypsum orthostats acquired by Lord Elgin belong to two parallel compositions answering in their general character to those of the Vapheio Cups and, like them, going back to the monumental prototypes of the Northern Entrance Porticoes of Knossos.

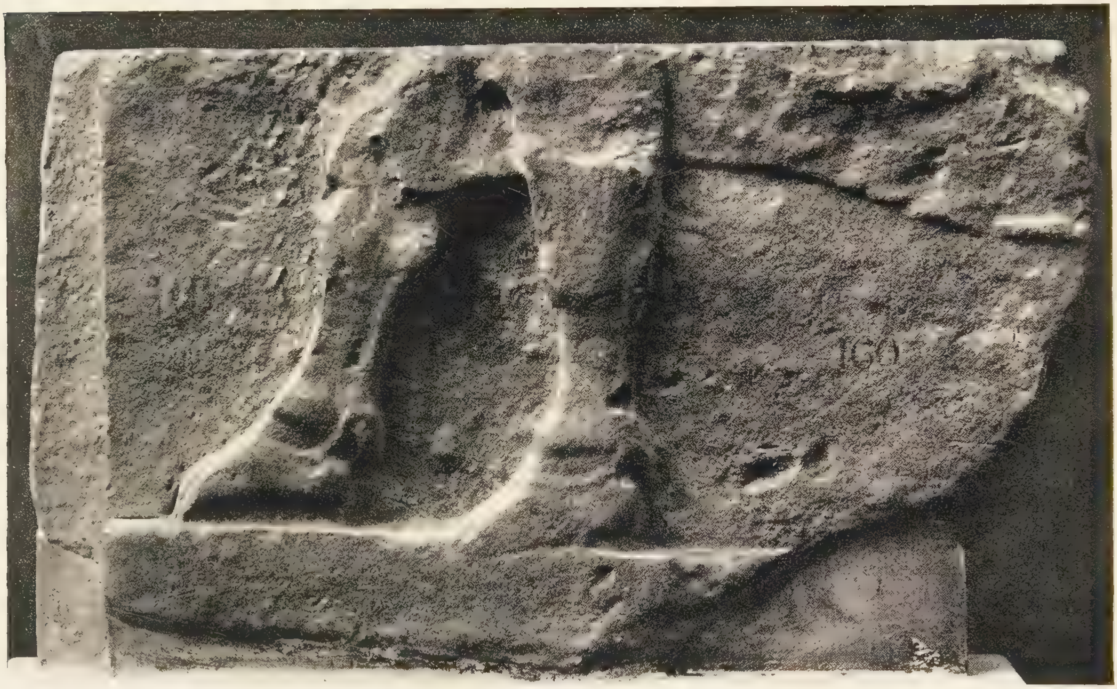

Fig. 136. Part of Relief of Stationary Bull from outside Façade of 'Atreus' Tomb, Mycenae. Elgin Collection.

Probably executed at Mycenae.

The intimate connexion with Knossos inherent in the material itself certainly agrees with this conclusion. The question as to whether the sculptures were executed on the Cretan site that produced the gypsum itself, or whether they may not rather be the work of Minoan craftsmen established at Mycenae, is difficult to answer. It can be safely said that in all respects they betray the mark of Minoan hands, working in the Age of the highest glyptic proficiency. The probability seems to be greater, however, that the gypsum slabs were imported to Mycenae rough-hewn, the details and the sculptural designs being carried out with convenient reference to the local conditions. To this may be added the undoubted fact that the production of larger figured reliefs in stone-work seems to have been a speciality of the Mainland branch of Minoan Art as we may see by the Lions' Gate at Mycenae and in a ruder aspect by the sculptured *stelae* found within the Grave Circle. In smaller works of this kind such as those on steatite vases the Cretan artists were unrivalled. So, too, in a series of white marble and alabaster 'rhytons' in the form of lions' and lionesses' heads, and, notably, in the 'Fitzwilliam Goddess' as well as in her ivory counterparts, we recognize their great skill in carving works in the round, a quality also conspicuous in the columnar lamps of red gypsum and other materials with their exquisite architectonic details as well as in the hard limestone friezes with their finely undercut rosettes. That the contemporary Cretan sculptors were capable of executing friezes such as those of which we have here the fragments need not be called in doubt. But, owing probably to the excellence of their hard lime plaster, supplied from local sources, and to the greater facility in plastic work afforded by its use, combined with the more durable character of its coloured decoration, they clearly preferred this material.

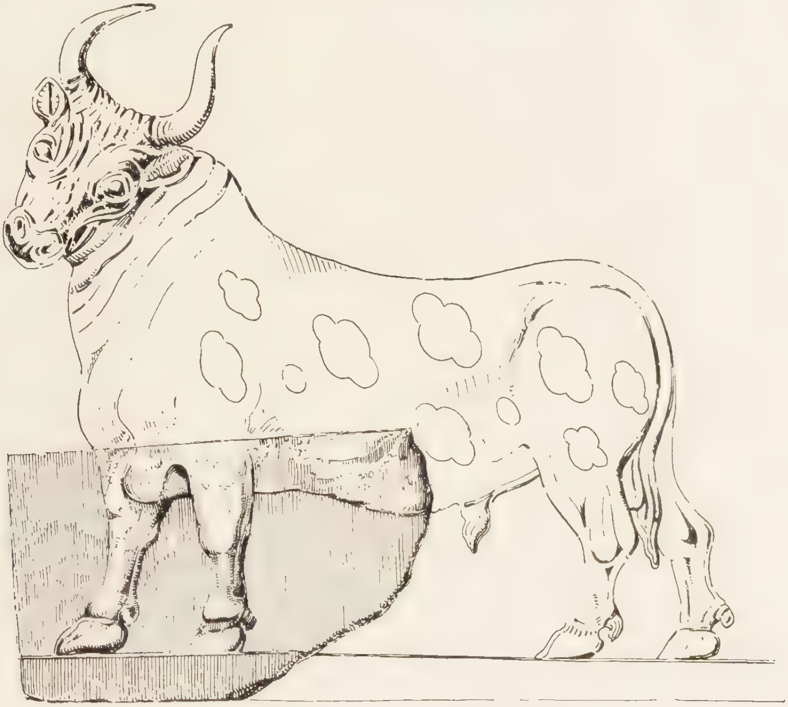

FIG. 137. PART OF RELIEF OF STATIONARY BULL ON ELGIN SLAB FROM OUTSIDE 'ATREUS' FAÇADE, MYCENAE: RESTORED.

By Minoan artist.

The height of the slab with the stationary bull, as to which the evidence is complete, is 43 centimetres. If we assume that the distance between the dressed edge at the top of the upper slab, Fig. 136, and the small edge at the bottom represents the original height it would be 55 cm. In this case the total height of the frieze, divided into two horizontal rows of slabs, would have been as nearly as possible 98 centimetres, answering to about half the average height of the gypsum dadoes in the Knossian Palace.

The Elgin reliefs being half-scale, it follows that the compositions to which they belonged, if of the same class as those of the Entrance Portico at Knossos, would have formed in either case a frieze about half as long as the approximate space occupied by the latter as deduced from the existing remains.[1] In other words the space required must have been of approximately six and a half metres.

Friezes—ot tympanum reliefs.

Perrot, who took the fore-part of the bull for that of a lion, had no difficulty in interpreting it as one of a pair of animals heraldically grouped on either side of the tympanum on the 'Atreus' façade. Since the width of this façade as exposed to view is 6·30 metres, exactly answering to the presumed length of the friezes, and three and a half metres, moreover, have to be taken from this for the width of the tympanum at its base, it is clear that neither the one nor the other of the two friezes presupposed by the Elgin fragments could have found a place there. The slab with the stationary animal, which Perrot has not endeavoured to place in his restoration, though provided with dowel-holes for attachment to masonry at the back similar to those of the 'Atreus' façade slabs, seems from the character of its base to have found an orthostatic position, possibly above the projecting plinth at the foot of a wall.

From side-walls of 'Atreus' dromos.

At the same time the connexion of both the two reliefs with the front part of the 'Atreus' Tomb is clearly suggested, as already pointed out, by the circumstances of their excavation. Apart from this, moreover, as is shown by the details and dimensions of the slabs themselves, there is sufficient evidence that they belonged to the same architectural plan. The thickness of the slabs and the height of the base of Fig. 136 agree with those originally fixed to the façade of the Tomb. The dovetail dowel-hole in the upper edge of the slab, Fig. 138, corresponds with one seen in the top bed of the lower part of the left-hand column of the Entrance.[2] This system of dovetailed sockets recalls those of the wooden cross-bars that tied the outer and inner orthostats of the West Wall of the Palace at

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[1] See pp. 166, 167.

[2] Pryce, *op. cit.*, p. 22, Fig. 18.

Knossos—in that case passing through an interval filled with rubble.[1] The narrow clamp sockets with deeper holes at the end for the 'claws' of bronze clamps that appear on the upper edges of both slabs are repeated on that of a decorative slab with spirals and disks from the upper part of the façade.[2]

That the two friezes to which the sculptured fragments belonged originally faced one another may be concluded from the analogies above adduced. Is it possible, then, that they had originally run along the base of the walls on either side of the entrance of the tomb?

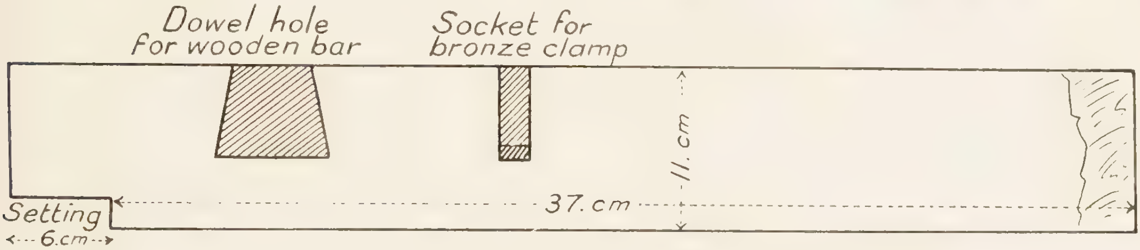

FIG. 138. UPPER SURFACE OF SLAB WITH STATIONARY BULL SHOWING DOWEL-HOLE AND SOCKET FOR CLAMP AND SECTION OF REBATE OR SETTING AT LEFT END.

Was there a fore-hall to tomb?

It is tempting thus to find an almost exact analogy with the friezes of the bull-hunting and bull-capturing scenes that seem to have stood respectively in the porticoes on either side of the Northern Entrance passage at Knossos. From the Palace this arrangement would thus have been transferred with curious appropriateness to an *atrium* of the sepulchral vault, and it may be observed that the engaged columns of the façade themselves suggest a comparison with the columnar porches that were the regular adjunct of the rock tombs of Middle Empire Egypt and which exhibited, besides, rich decorative designs in coloured relief.

Signs of restoration of dromos walls.

It might be urged against this view that the existing dromos walls of the 'Atreus' Tomb show no signs of corresponding dowel-holes such as those of the façade for fixing the sculptured slabs, which would also have intruded too much into the gangway. But there is strong evidence that the dromos walls themselves, as we see them, are in fact a comparatively late work of restoration. Mr. Wace in the course of the explorations undertaken by the British School in 1921–3 found—under what was clearly a lintel-block,[3] transported here at the time when the North Wall of the dromos was re built, and re-used to span a gap in the rock—a Late Mycenaean sherd and a contemporary terra-cotta 'idol'. Most of the pottery found under the South wall was also of the same age of Mycenaean decadence, far remote from the great days when the mighty vault and its façade themselves were executed.[1] It must, indeed, be regarded as archaeologically proven that the dromos walls in their existing form do not represent the original construction.

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[1] *P. of M.*, i, p. 128, Fig. 95. Professor Lethaby had long since pointed out the parallel with the Mycenae sockets.

[2] Pryce, *op. cit.*, p. 26, 'A 54'. One of the clamp holes on the upper face of this slab has been re-used for the iron clamp that fixes it to the wall of the B. M. Sculpture Gallery.

[3] *B. S. A.*, xxv, p. 340: 'The upper angles at each end are nicked, just like the angles of the inner lintel-block of the Panagia Tomb (Fig. 59). Its under-side has a beautifully smooth sawn surface. This block then was

Professor J. L. Myres has also been independently led on structural and other grounds to the conclusion that the façade of the Tomb as originally visible was somewhat wider than it is at present, and that it has been encroached on by the abutment of a later dromos wall on either side. It is not of course necessary to suppose, judging by other Minoan analogies, that an abutting wall would have been bonded in.

Re-used lintel-block—perhaps of entrance to fore-hall.

The re-used lintel-block lay about 5 metres from the entrance of the existing dromos at a point where the original rock of the hill dropped away sharply to the East to the depth of 1·35 metres and marks the beginning of a distinct outer section of the avenue where the ground had to be made up. Is it possible that the lintel-block itself had been actually in use at some point nearer the entrance of the Tomb and had once stood over the doorway of an inner fore-hall in front of it? It would in that case—though its central space was certainly not roofed over—find an analogy with the forehall of the Royal Tomb of Isopata near Knossos.[2]

Such a fore-hall, corresponding, as already observed, with the porches of Middle Empire tombs, might have supplied ample space on either side for the sculptured friezes.

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originally intended for a lintel-block, since no builder would saw a surface and then build it where it could not be seen, but was for some reason or other discarded.' If, however, the block was placed in its position at the date indicated by the associated pottery, it might well have been taken from a ruined structure and re-used as a bridge of support when the dromos wall was rebuilt. If so well furnished and otherwise perfect, why should it have been discarded?

[1] See A. E., *The Shaft Graves and Bee-hive Tombs of Mycenae and their Interrelation* (Macmillans, 1929), p. 67 seqq.

[2] See A. E., *Prehistoric Tombs of Knossos*, (*Archaeologia*, lix), p. 137 seqq., and the Plan, Pl. XCIII.

§ 77. The Taureador Frescoes.

'Cow-boy' feats in the open to be distinguished from Circus Sports; Oriental associations of the latter—Cappadocian cylinder sealing; M. M. I a *'rhytons' with acrobatic figures; Covering on bulls—parallels from early Cylinders and Bull of Apis; Elements of distinction between the two classes of subject; Theatral sports in honour of Goddess; Miniature representations associated with shrine—the Ivory Deposit; Fragment from 'Queen's Megaron'; Early example from beneath 'Kasella' floor; Deposit of 'Taureador Frescoes'—probably belonging to Close of L. M. I* a*; Their character and position on wall; Elegance of the female performers; Use of 'Cestus' round wrist; Tumbler caught by female attendant; Analogous bronze group from Crete—acme of Minoan metallurgic Art; Diagrammatic sketch of acrobat's evolutions; Conjectural form of Arena, fenced oval enclosure within rectangular; Dangerous aspect of sport—overthrown performers; 'Sacral Knots' before bulls, sign of Consecration: Comparison with sports of the Amphitheatre and Plaza; Spanish* Corridas *outgrowth of sports of Roman* arena*; Was there a Sacrificial sequel to Minoan sports?* Matador *on Thisbê bead-seal; Female performers devotees of Goddess—signs of gentle birth; Precedence of women in Minoan Society; Princes and Grandees participating in Spanish bull-fights compared; Chevaleresque sanction in Spain just as religious in Crete; Survival of Minoan* taurokathapsia *in Thessaly, in equestrian form—the Oxford relief; Parallel survival of earlier form of bull-grappling on foot; Heroic feats of kind in Greece traced to Minoan source; Absorbing attachment of Minoans to bull-sports: Attitude of Roman and Spanish spectators compared and contrasted; Reaction of monumental remains on Greek tradition—but false idea of Captive performers.*

Cow-boy feats in the open.

Bull-grappling scenes, such as those referred to in the two previous Sections, essentially belong to the open. Two contrasted compositions appear before us of which we have the fullest record in the marvellous repoussé designs of the gold cups from the Vapheio Tomb, and the parallels of which we recognize on the remains of the painted reliefs from the porticoes above the Northern Entrance Passage at Knossos and, again, on the fragmentary gypsum slabs brought back by Lord Elgin from the vestibule of the 'Atreus' Treasury at Mycenae. Both of these contrasted subjects represent different versions of the 'Cow-boy' class. In them the skill of the performers—both male and female—is concentrated on the herding or catching of wild and half-wild cattle either by driving them into narrow defiles beset with obstacles and ambushes or by the more crafty methods illustrated by the employment of a decoy cow. The successful tackling of the bull drinking at the tank must also be grouped among true 'Cow-boy' feats.

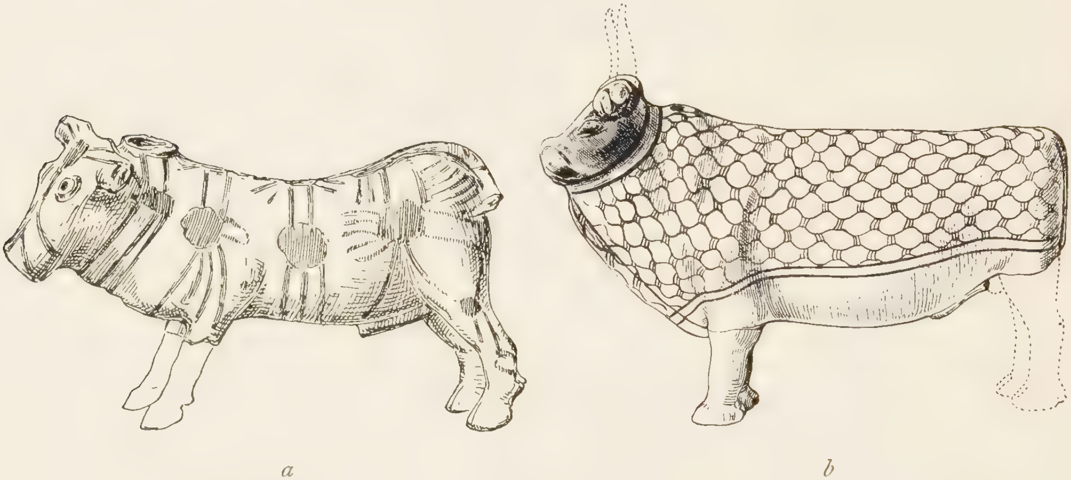


FIG. 139. BULL 'RHYTONS' SHOWING CEREMONIAL COVERINGS: *a*, MOCHLOS, M. M. I *a*; *b*, PSEIRA, L. M. I *a*.

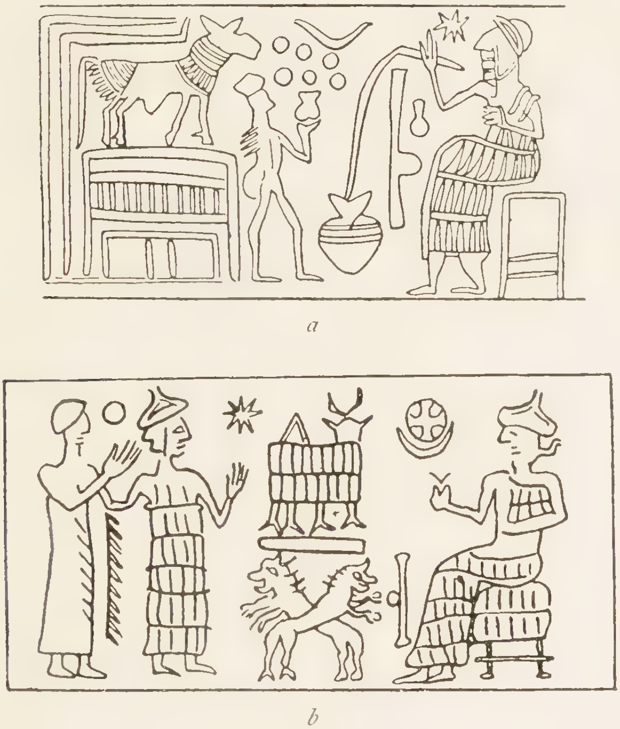
We must turn from the Northern Entrance to the East Palace slope and notably to a chamber overlooking the great Bastion on that side for evidence of a more strictly organized and ceremonial form of the sport confined, of its very nature, to a specially devised structure. The location, indeed, of the painted plaster records on that side has perhaps a special significance if, as seems likely, the Palace Bull-ring itself lay on the river flat immediately below.

To be distinguished from Circus Sports.

While, on the face of it, it is reasonable to suppose that the country sports, marked by the rocky character of the ground and the occurrence of olive-trees and palms, represent the earlier version of such scenes, there are at the same time certain indications involving the conclusion that the ceremonial grappling of sacred bulls was practised from the earliest days of the Age of Palaces in Crete in the true manner of the later bull-rings. The religious part of the performance, indeed, may already have reached Crete at that early epoch—from the close, that is, of the Third Millennium

Their oriental associations; Cappadocian cylinder sealing.

B.C.—in a fully developed stage,—like so many other elements, including features in the Palace plans themselves. Mention has already been made of the pregnant fact that sports of a similar nature appear on a cylinder impression on a sealed clay envelope from Cappadocia[1] dated by Sayce at about 2400 B.C. A bull is there seen kneeling, with a throne-like structure on his back. A man appears in front, with his face on the ground and feet in the air, falling on his left arm and with his right stretched out backwards, while to the right is a man standing on his head.


a

b

Fig. 140, *a*, *b*. Sacred Bulls with Ritual Trappings on Early Cappadocian Cylinders.

M. M. I *a* 'rhytons' with acrobatic figures.

It is a suggestive circumstance, moreover, that the first direct evidence of such set performances in Crete is supplied by some examples of the early bull-shaped 'rhytons' which, as we now know, go back to remote Sumerian prototypes.[2] Two specimens of these, indeed, of M. M. I *a* date—corresponding with the 'Proto-palatial' phase—found in the primitive tholos tombs of Messarà not only show the acrobatic seizure of the animal but exhibit some kind of coverings on the bulls' backs which clearly denote their sacred character. On the remarkable type in which little acrobatic figures seize the bull's horns, a covering of this kind is seen over the beast's flanks.[3] Another, Fig. 139, *a*, of contemporary date, found by Mr. Seager in a Mochlos tomb, shows a series of bands round the bull's body.[4] What is more, as has already been pointed out, this method of dressing up the animal survived into the 'New Era'. On a bull 'rhyton' found by the same explorer at Pseira in association with L. M. I *a* pottery, Fig. 139, *b*,[1] the bull is seen wearing a net 'jacket', painted either in an orange red or purple on a chalky white slip—a reminiscence of polychrome traditions.

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[1] Pinches, *Liverpool Annals of Archaeology and Anthropology*, i, p. 76 seqq., No. 23.

[2] *P. of M.*, ii, Pt. I, p. 260 seqq., and Figs. 156, 157. Another specimen is now in the British Museum.

[3] From Portì (Xanthudides, *Vaulted Tombs of Mesará* (transl. Droop), Pl. XXXVII, 5052 and p. 62). See *P. of M.*, i, p. 188 seqq., and Fig. 137, *a*, from a photograph kindly supplied me by Dr. Xanthudides. The lines on the flank, which are very faint, appeared on this to be crossed at right angles.

[4] See *ibid.*, ii, Pt. I, p. 259, Fig. 151, *a*. Seager, *Mochlos*, p. 60, Fig. 29, Grave II.

It is interesting to observe that here, too, we find a parallel usage in connexion with the sacred bulls seen on early Cappadocian cylinders of the class referred to above (Figs. 140, *a*, *b*).[2] On these the bull, his body either entirely covered, or with bands on his neck and rump, stands on an altar—in one case apparently within a shrine. The God, distinguished by celestial emblems, is seated in front of the sacred animal. These comparisons derive special interest from the fact that they belong to the second half of the Third Millennium B.C., thus approaching the date, approximately fixed as *c.* 2100 B.C., of the beginning of the First Middle Minoan Period, to which we must ascribe the earlier series of the Cretan bull 'rhytons'. We may trace here, therefore, an intermediate link between them and their still more remote Sumerian prototypes of a thousand years earlier.

It is to be noted that the bull of Apis also appears with similar decoration in the form of a collar and what looks like a variegated cloth over his back, together with wings of the Sacred Vulture. But these Nilotic representations belong to a much later date.[3]

Elements of distinction between the two classes.

In individual cases, especially in excerpts such as we see in the field of intaglios and detached from the surroundings, it is often difficult to determine to which class a bull-grappling episode should be referred. The performers themselves, of either sex, belonged to the same 'Cow-boy' class, and many of the feats exhibited might as well have occurred in the open as in an enclosed arena. In certain respects, however, the distinction between the two classes is clear. Thus the rope obstacles between trees, the trees themselves and the rocky landscape, the lassoing scenes, probably, and those portraying stationary or walking animals belong rather to the country-side. The skilled feats of the actors in these scenes are brought to bear on the practical needs of cattle-breeding and might be paralleled at the present day on many ranches of the 'Wild West'. But, apart from such episodes as may be regarded as more or less utilitarian in their nature, there must be recognized another cycle of performances that mark a professional acrobatic class. The attire is still the same as those of the Cow-boys proper, of both sexes, but the feats here—such as the turning of a back-somersault over the neck of a coursing bull—are primarily designed for show. The stationing of other figures to catch the leaping performers suggests, moreover, an enclosure of somewhat limited dimensions, and implies elaborate artificial arrangements.

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[1] *Pseira*, pp. 22, 23, Fig. 7.

[2] From Dr. Ludolf Matten's comprehensive article *Der Stier in Cult und Mythischen Bild* (*Jahrb. d. d. Arch. Inst.*, xliii, 1928). Dr. Matten was unaware of the remarkable Cretan parallels to the ceremonial coverings of the sacred bulls. (see p. 110, Figs. 29, 30).

[3] See, for instance, the bronze figure of Apis, Wilkinson, *Anc. Egyptians*, 1878 ed., vol. iii, p. 88, Fig. 1.

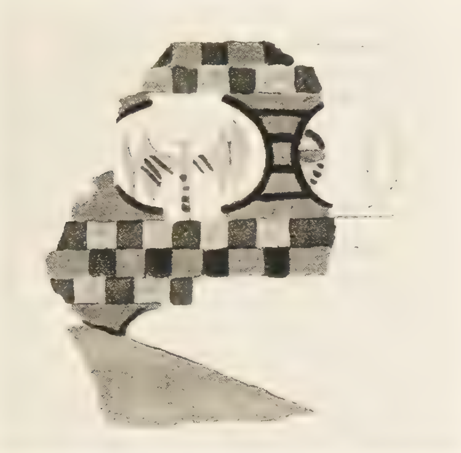

Fig. 141. Miniature Fragment from 'Ivory Deposit' showing Part of Shrine with Frieze of Double Axes and Bull's Neck in Field below. ($\frac{1}{1}$)

Theatral sports in honour of Goddess.

It is evident that the great Minoan Goddess herself, as the impersonation of the spirit of the race, shared the delight of her worshippers in these sensational *Corridas*. In the 'Miniature' fresco, described above, her Pillar shrine is set in the middle of the Grand Stands occupied by the crowds of spectators—like the Royal Box at a Court Theatre.

Of the character of the spectacle itself, not included among the remains of this fresco, we obtain an insight from the 'Miniature' fragments from the 'Ramp House' at Mycenae, which include both ladies seated in 'boxes' and parts of a scene from the bull-ring. Moreover, the superposed pillars seen in the 'Temple Fresco', and which elsewhere supply the theatral idea, are constantly coupled in the small reliefs of steatite 'rhytons' as well as in signet-types with similar bull-grappling scenes, though it is clear that the same arena also served for such sports as boxing and wrestling.

'Miniature' representations associated with shrines: Ivory Deposit.

In the 'Deposit of Ivories', to be described below, the association of a shrine with performances of the 'bull-ring' is again clearly featured—the sanctuary in that case connecting itself with the cult of the Double Axes. The fragment reproduced in Fig. 141 shows the chequer-work common in architectural façades combined with a band, broken by round and oval compartments, in which the symbolic weapon of the chief Minoan divinity is depicted respectively in its single and its double-edged form. In the field below is a yellow object with traces of dark stripes, the outline of which runs up diagonally, and in which we must recognize part of the raised neck of a charging bull. It is against a white ground, with what appears to be the capital of a column to the left. This representation is supplemented by another small fragment (Fig. 142) which presents an exquisite delineation of the horn and ear of a bull's head turned towards the spectator. A small bull's head of whitish faïence with gold sockets for the insertion of the horns and blue paste eyes also came to light in the deposit.[1]

Fragment from 'Queen's Megaron'.

Near by, in an upper stratum of the adjoining 'Queen's Megaron', and probably belonging to the same group as the preceding, was also found a fresco piece of the 'miniature' class showing a female figure with flying tresses springing down to seize a bull's horns[2] (Fig. 143). Here a remarkable but hitherto unobserved feature is the section of two separate locks of hair in the uppermost fragment to the left, which, as indicated in the restored drawing executed for me by Monsieur Gilliéron, fils, belong to a second acrobatic figure. The female figure to the left, from the action of the hands, was at first regarded as swimming. That exercise as practised by the Minoans is more truly depicted in the newly discovered inlays of the Vapheio blade.[3]

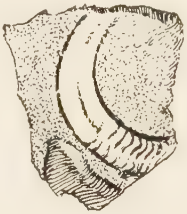

FIG. 142. FRAGMENT OF MINIATURE FRESCO SHOWING BULL'S HORN AND EAR. ($\frac{10}{9}$)

The figure bears some analogy to that of the well-known Tiryns fresco,[4] also, as its skin colour shows, relating to a female performer, which is, however, of considerably later date.

The spectators looking on at bull-grappling sports depicted in the remains of the miniature wall-paintings of the Megaron at Mycenae lead us to infer that the circus scenes of which we have a hint in the fragments found in the 'Deposit of Ivories' were backed by a like assemblage. The crowds on the Grand Stands of the 'Temple Fresco' were absorbed in the contemplation of similar feats.

Example from beneath later 'Kasella' floor.

In addition to the above finds of 'Miniature' scenes connected with shrines and theatral structures there must also be recalled a discovery of somewhat exceptional interest from a chronological point of view. This was the fragments of painted stucco presenting large crowds of male spectators found beneath the later 'Kasella' floor of the XIIIth Magazine and executed in the same 'shorthand' styles as the Miniature frescoes though slightly larger in scale. With these, too, was associated another painted stucco fragment showing part of the head of a coursing bull together with the flying locks of an acrobatic figure.[1] Taken in connexion with other fresco remains found in this and parallel deposits, we have here, in fact, not only clear evidence that ceremonial sports of this kind were in vogue at Knossos in the age that preceded the great seismic catastrophe of M. M. III but a distinct indication that they may have been already in existence in the earliest phase of that Period.

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[1] See below, p. 434, and Fig. 302.

[2] Reproduced by Bulle, *Orchomenos*, i, p. 128, Fig. 38. His description (p. 80) fails to take note of the flying lock of hair belonging to the second figure above the bull's head. Parts of two men in the act of springing, evidently forming part of a similar scene, occurred among the fresco fragments from Orchomenos (*ibid.*, Pl. XXVIII, 8). These, however, are of poor execution, and of a distinctly later date.

[3] See above, Fig. 81, opp. p. 127.

[4] Schliemann, *Tiryns*, p. 303 seqq. (Dr. E. Fabricius) and Pl. XIII; see W. Reichel, *Jahreshefte d. Oest. Arch. Inst.*, i, 1898, p. 13 seqq., and Rodenwaldt, *Tiryns*, ii, Pl. XVIII, and p. 162 seqq. Rodenwaldt remarks (p. 165) of the Knossian 'miniature' fragment 'neben ihm wirkt das Tirynther Bild wie eine Caricatur'.

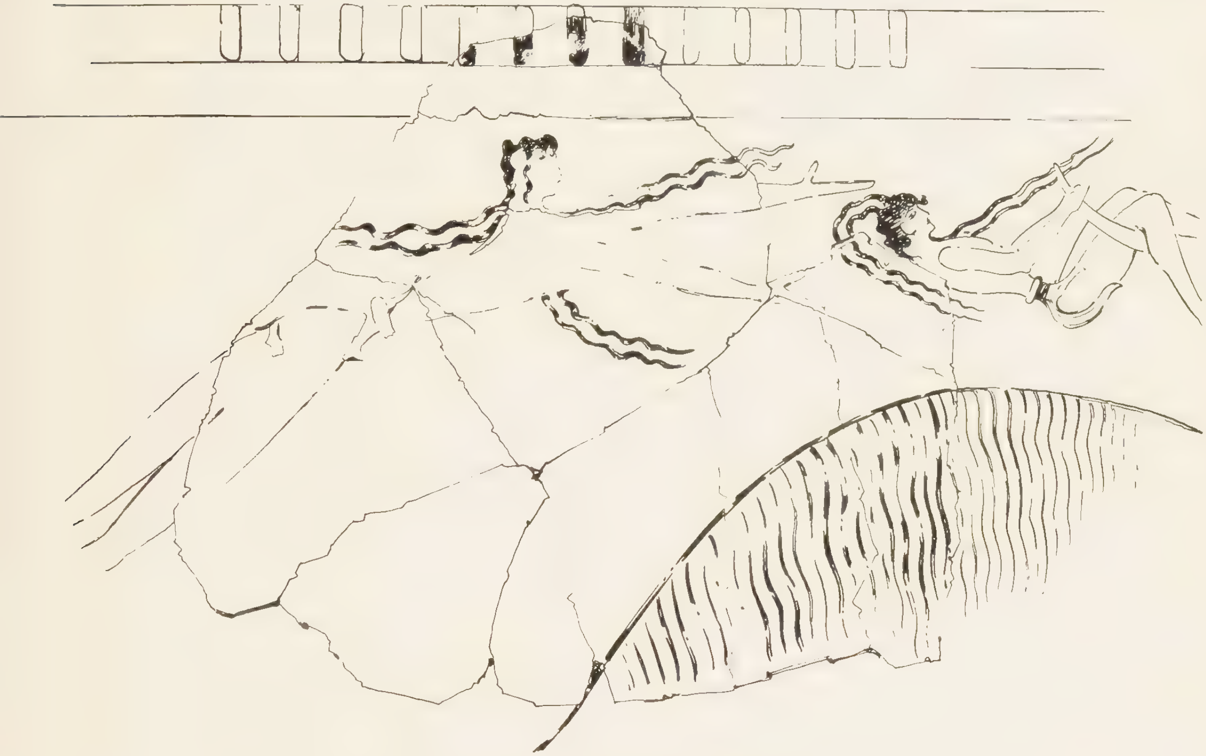

FIG. 143. FEMALE ACROBAT SPRINGING TOWARDS BULL'S NECK AND LOCKS OF ANOTHER. (PARTLY RESTORED BY MONSIEUR E. GILLÉRON, FILS.)

'The Taureador Frescoes.'

Deposit of 'Taureador Frescoes'.

It is, however, to a fairly advanced phase of the restored Palace that it seems necessary to ascribe the painted stucco remains that supply our fullest illustration of these acrobatic performances. The structures with which these were connected lie on the East slope of the Palace site and the fragments themselves belonged to a floor on a level above the still existing ashlar wall that marks the inner boundary of the 'Court of the Stone Spout' and thence continues South. They were found near the South-West Corner of this little Court and mostly at a mean height of about a metre and a half above its terrace level. By all appearance they must have been derived from an upper room, perhaps partly superposed on the fine Ante-Chamber that preceded the later lower-floor arrangement to which belonged the so-called 'School Room'.[1] (See revised Plan, Fig. 183, opp. p. 270.)

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[1] See *P. of M.*, i, pp. 527, 528, and Figs. 384, 385.

Fallen thus from an upper floor, the painted stucco occurred in company with numerous fragments of L. M. II pottery. With these, however, besides some earlier sherds with 'grass' and other naturalistic decoration, there occurred good fragments of the 'marine style' dating from the later phase of the L. M. I ceramic style.[2] It is reasonable to refer the wall-painting to a date not later at least than the First Late Minoan phase.[3] Since there is a good deal of evidence of a considerable redecoration of the building about the close of L. M. I *a*, it may be safest, indeed, to assign at least the more finely executed fresco remains found in this deposit to that epoch, in other words to a date shortly preceding 1500 B.C.

Probably belonging to close of L. M. I *a*.

Their character and position on wall.

The remains of these 'Taureador Frescoes'—as they may be fittingly called—belong to several panels. Although the figures in these are three or four times larger than those of the miniature panels—32 cm. (*c.* 12¾ in.) as against 10–8 cm. (*c.* 4–3⅛ in.)—the panels have this in common, that they were comparatively low. The height of that restored in Fig. 144 is 78·2 centimetres, including the decorative framing.[4] This height, approximating to 80 cm., corresponds with that conjecturally assigned to the 'Miniature Frescoes'.[5] It also agrees with that already arrived at for the painted friezes of the 'House of the Frescoes'.[1] In these cases the fresco bands seem to have run immediately under beams forming the continuation of those of the lintels and would have been superposed on low dadoes about 1 metre high. In the case of the 'Partridge Frieze' of the Caravanserai Pavilion, however, there is clear evidence that the painted band ran above the level of the lintel beams and, from the artistic point of view, was consequently somewhat 'skied'. In the present case we may suppose that the 'Taureador' panels were set above dadoes of the full height of somewhat over 2 metres, and this seems best in keeping with the decorative methods in vogue within the Palace at the time of the L. M. I restoration, though a lower position, like those of the 'House of the Frescoes', might have suited the designs better.

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[1] For the L. M. III *b* date of this later arrangement see below, p. 266.

[2] These observations result both from the original discovery, *Knossos, Report*, 1901, p. 94, and from supplementary investigations of an exhaustive character made by me in this area in 1913. Some further fragments came to light on that occasion above the remains of the fine M. M. III *a* wall that borders the 'Court of the Stone Spout' on the South. The Court itself took its present form early in the M. M. III Period, and a blind well, connected by a stone drain from a spot beneath the Spout in the West wall, was filled with pottery like that of the Magazines that contained the 'Lily Vases'.

[3] This is in general agreement with Rodenwaldt's conclusion (*Tiryns*, ii, p. 198) that these frescoes should be placed 'between the earlier and later group' at Knossos—that is, immediately before those of the Last Palace Period (L. M. II).

[4] The design without the framing is 37·5 cm. in height and the border was 20 cm.

[5] See above, p. 44 and note 4.

Approximate date.

It is certainly difficult to place these 'Taureador Frescoes' later than the First Late Minoan Period. The delicate delineation of some and the fine enamelled surface, especially in the case of the white paint, themselves point to an age when the art of wall-painting had reached its highest level. On the other hand certain accessory details, such as the imitation *intarsia* work in variegated stones that decorates the borders,[2] betray a certain sympathy with a style of border fashionable in the last age of the Palace (L. M. II).

Elegance of female performers.

The designs were originally distributed in several panels, and in the case of one of these it was possible to restore the whole composition (Fig. 144).[3] Here, besides the male performer, of the usual ruddy hue, who is turning a back-somersault above the bull, are two female taureadors, distinguished not only by their white skin but by their more ornamental attire. Their loin-cloth and girdle is identical with that of the man but of more variegated hue: his is plain yellow, theirs are decorated with black stripes and bars. They wear bands round their wrists and double necklaces—one of them beaded—and, in the case of some of the figures, blue and red ribbons round their brows. But perhaps their most distinctive feature is the symmetrical arrangement of short curls over their foreheads and temples, already noticed in the case of the female 'cow-boy' of the Vapheio cup. A further illustrative fragment is given in Fig. 164 B, at the end of the Section. Their foot-gear consists of short gaiters or stockings and pointed mocassin-like shoes.

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[1] *P. of M.*, ii, Pt. II, pp. 459, 460. The word 'width' is there applied where 'height' is meant.

[2] The pattern recurs at Tiryns (Rodenwaldt, *Tiryns*, ii, p. 62, Fig. 24), but in a more decadent shape, with the variegations of the stone inlays more summarily rendered. This form of decoration was long-lived in the Minoan world; witness the imitation of inlays of the same shape on the ivory plates of the top of the draught box found at Old Salamis in Cyprus (*B.M. Excavations in Cyprus*, p. 12, Fig. 19). It is itself a variant of the scale pattern used as a conventional indication of rocks (see *P. of M.*, i, p. 312 seqq.).

[3] Mr. Noel Heaton observes of these fresco remains, 'the horizontal border at the top and bottom apparently ran straight on, the vertical border dividing the wall into panels. The background on which the figure subject is painted was varied in the different panels, alternating between blue and yellow'. He remarks on the exceptional absence of the joints usually found in the borders of the plaster in the case either of its horizontal or vertical divisions. The plaster in this case runs without a break from one panel to another, and 'was not divided up into areas of sufficient size for the decoration to be completed before the process of setting became too advanced'. He infers that (as seems also certain in the case of the Miniature Frescoes) a large number of workmen were engaged in filling in the details. 'The main outlines were inscribed on a wet plaster as a guide, then the outlines of the figures sketched in, the background filled in with the uniform wash of blue or yellow, and finally the details of the figures added.' This was the normal process.

In the design seen in Fig. 144 the girl acrobat in front seizes the horns of a coursing bull at full gallop, one of which seems to run under her left armpit. The object of her grip, clearly shown in the enlarged reproduction of this section in Fig. 145, seems to be to gain a purchase for a backward somersault over the animal's back, such as is being performed by the boy. The second female performer behind stretches out both her hands as if about to catch the flying figure or at least to steady him when he comes to earth the right way up. The stationing of this figure handy for such an act raises some curious questions as to the arrangements within the arena.

Apart from this, certain features in the design have provoked the scepticism of experts acquainted with modern 'Rodeo' performances. A veteran in 'Steer-wrestling', consulted by Professor Baldwin Brown,[1] was of opinion that any one who had anything to do with that sport would pronounce the endeavour to seize the bull's horns as a start for a somersault as quite impossible 'for there is no chance of a human person being able to obtain a balance when the bull is charging full against him'. The bull, as he further remarked, has three times the strength of a steer, and when running 'raises his head sideways and gores any one in front of him'.

'That a somersault was performed over the back of a charging bull seems evident and does not seem to present much difficulty, but surely if the bull were at full gallop the athlete would not alight on its back, but on the ground well behind it?'

All that can be said is that the performance as featured by the Minoan

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[1] I am greatly indebted to Professor Baldwin Brown for placing at my disposal an account of the results of a personal inquiry into these matters addressed to a 'rodeo' expert. These served to confirm objections that he himself entertained to what seemed the obvious interpretation of the Minoan designs.

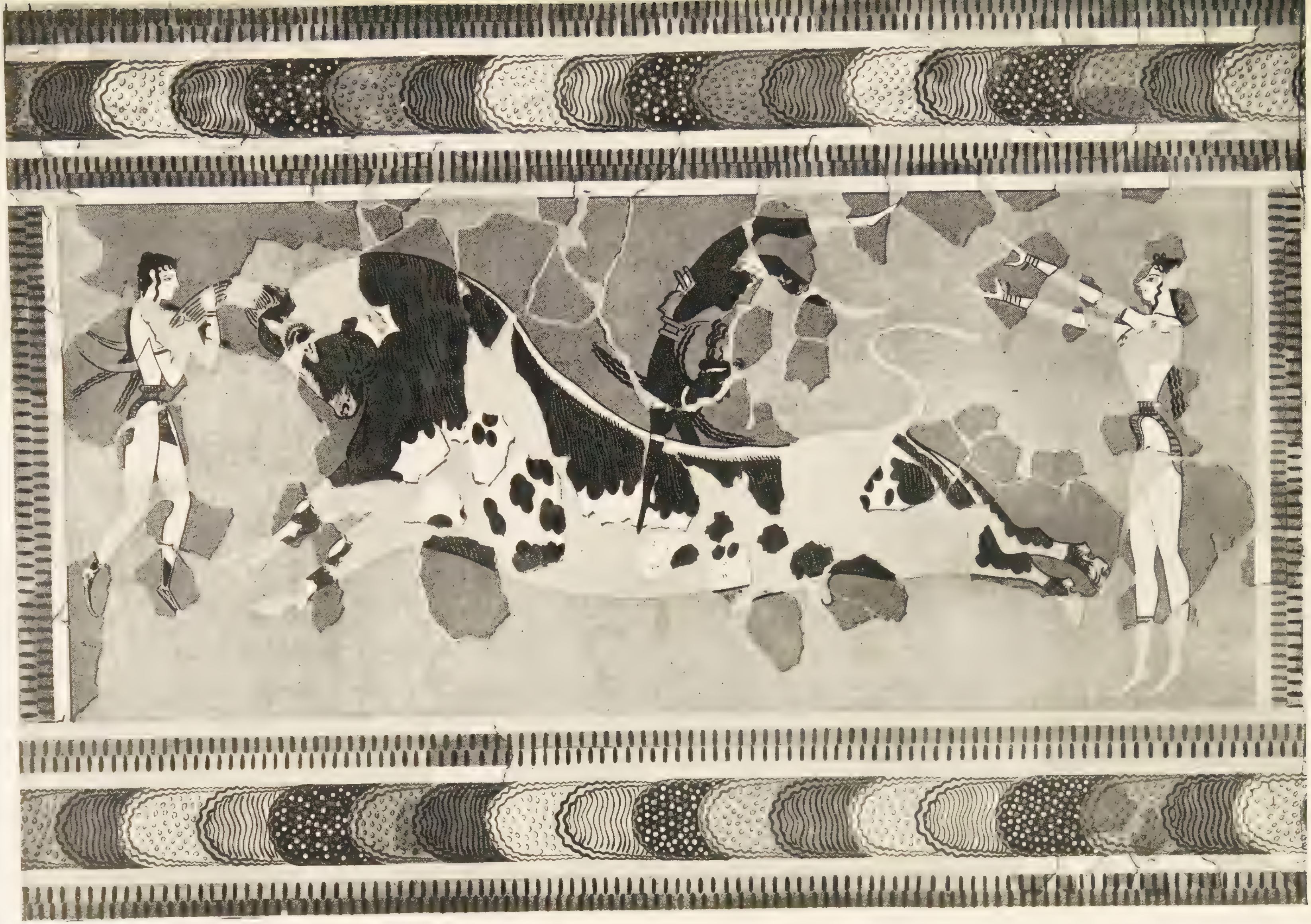

FIG. 144. RESTORED PANEL OF WALL-PAINTING SHOWING SCENE OF THE BULL-RING WITH TWO GIRL PERFORMERS.

artist seems to be of a kind pronounced impossible by modern champions of the sport. The fresco design shown in Fig. 144 does not, as we shall see, stand alone, and the successive acts that it seems to imply find at least partial confirmation in a clay seal-impression (Fig. 149, below), and in the bronze group (Fig. 155), where the acrobatic feat is illustrated by the diagrammatic figure (Fig. 156).

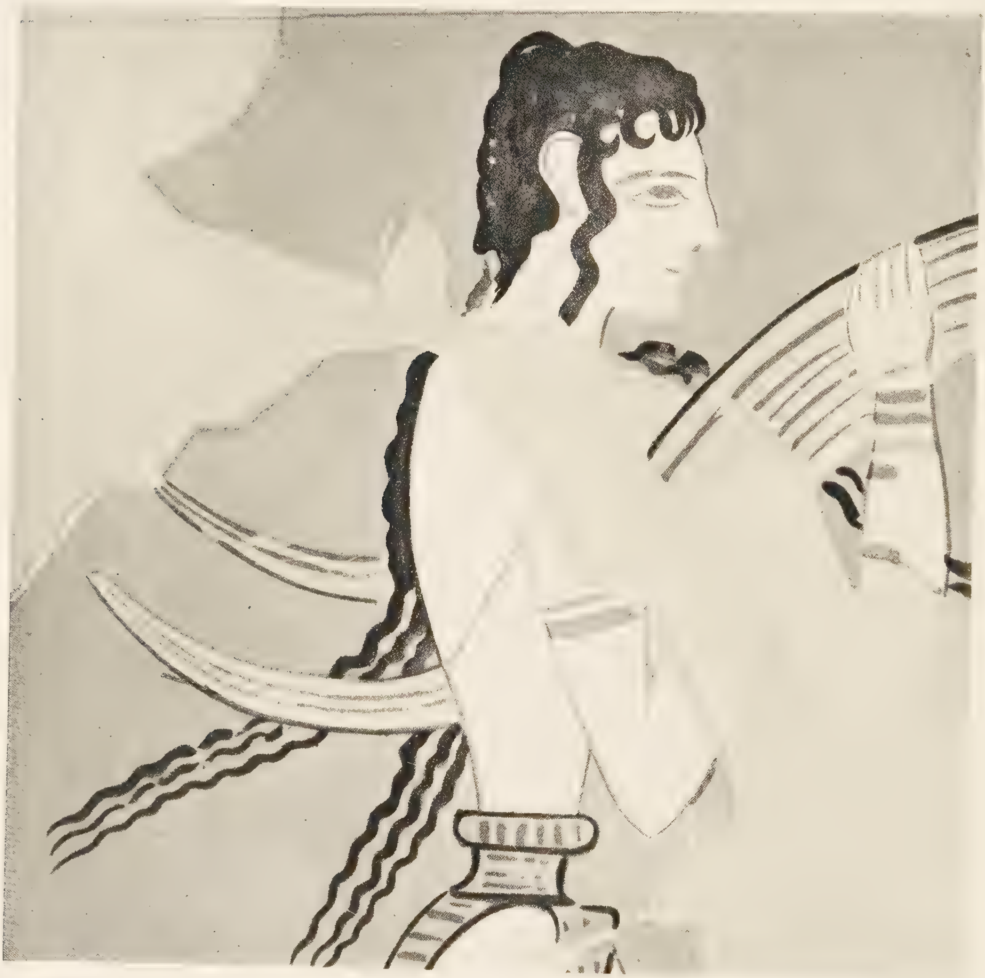

Fig. 145. Section of Design showing Female Acrobat raising Herself by the Bull's Horn.

But if the feat as thus logically developed would seem to transcend human skill, it is equally true that such scenes as are illustrated by a series of scenes on gems in which the bull wrestler seems to lift the whole mighty beast,[1] are no less on a superhuman scale. At the same time they can be matched in this by the intaglio type given above,[2] where the hero, armed as he is with a dirk, grips the lion's neck with his left hand.

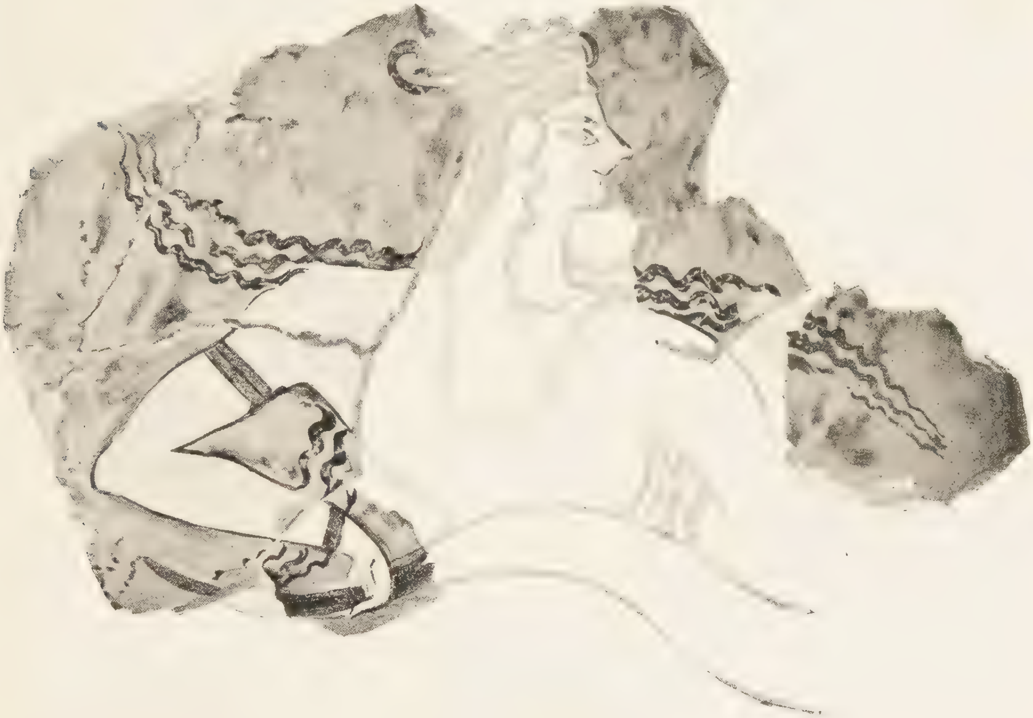

FIG. 146. FRAGMENT OF FRESCO PANEL SHOWING FEMALE TAUREADOR SEIZING BULL'S HORN.

All old African hunters know that such personal contact with a lion means nothing less than death.

The apparent action of throwing an arm over a bull's horn rather than actually gripping it is illustrated by another spirited fragment of this group of frescoes of which a restored drawing by Monsieur Gilliéron is reproduced in Fig. 146. The right hand of the female acrobat does not here seize the horn, though thrown over it, but is tightly clenched, as the result of extreme physical tension. An interesting analogy to this is supplied by the fragment of a high relief, where the hand is seen over the tip of a bull's horn similarly clenched.

It is clear that this painted relief fragment, found in the Deposit of High Reliefs described below,[3] represents part of an acrobatic figure, in this case, as the red colouring shows, a man, with his arm thrown over the bull's horn and his hand not grasping it but clenched in a similar way (see Sketch, Fig. 147).

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[1] Compare, for instance, Figs. 162–164, p. 231 below.

[2] p. 125, Figs. 78, 79.

[3] See below, p. 497 seqq.

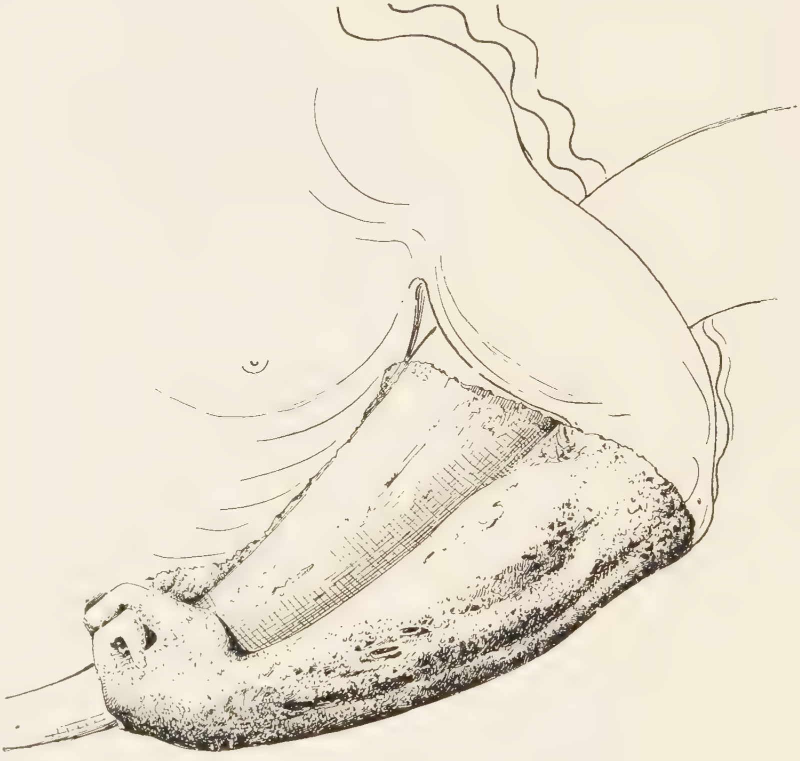

FIG. 147. RESTORED SKETCH OF FRAGMENT FROM DEPOSIT OF HIGH RELIEFS.

In the delicately executed design, reproduced in the Coloured Plate XXI, about one-third scale[1]—the fine lines of which recall the designs on white Athenian *lekythoi*—another female figure is seen in the act of leaping, with flying tresses, one arm held downwards and the other raised. A noteworthy feature in this representation is the strap, wound not only round the wrist but round parts of the hand. This form of *cestus* obviously had nothing to do with striking a blow, and must have been rather devised to give strength to the muscles and tendons. It recurs on the hand of the youth shown in Fig. 148 who is depicted flying through the air, as if in the act of alighting behind a galloping steer, whose hind legs appear below.[2] Acrobatic feats of the same kind as the above are still said to be performed in some Portuguese *corridas*.

Use of *Cestus* round wrist.

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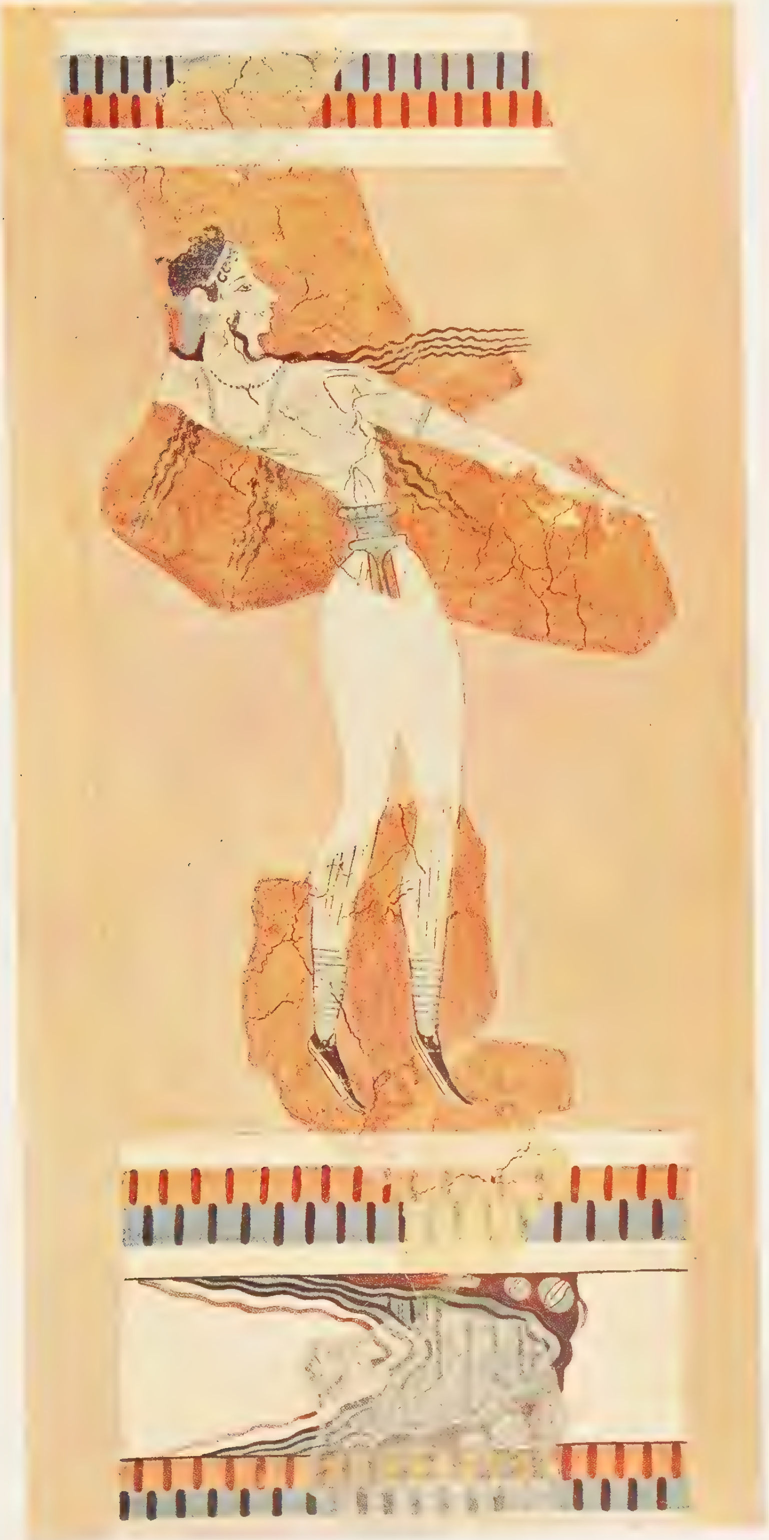
[1] The original pieces shown in the Coloured Plate XXI and Fig. 148 were given me by the Cretan Government and are now in the Ashmolean Museum at Oxford. The drawing of Fig. 148 was traced under my superintendence from a photographic reproduction and the details minutely checked with reference to the original. The sketch is by Mr. E. J. Lambert.

[2] There can be little doubt as to the connexion of the three fragments shown in Fig. 148. They were found together, and all have the same blue ground. The white object on the neck and breast represents two necklaces in a heavier style. Some of the strands of hair, of which only faint indications have been preserved, are reinforced in the drawing.

PLATE XXI



PART OF FRESCO PANEL: LEAPING GIRL FROM SCENE OF BULL-RING ($\frac{1}{3}$)

These highly sensational episodes are primarily exhibitions of acrobatic skill. In this respect, as already noted, they differ from the parallel performances of the Minoan cow-boys, the aim of which was rather the catching of wild or half-wild animals. That girls actually took part in this more practical

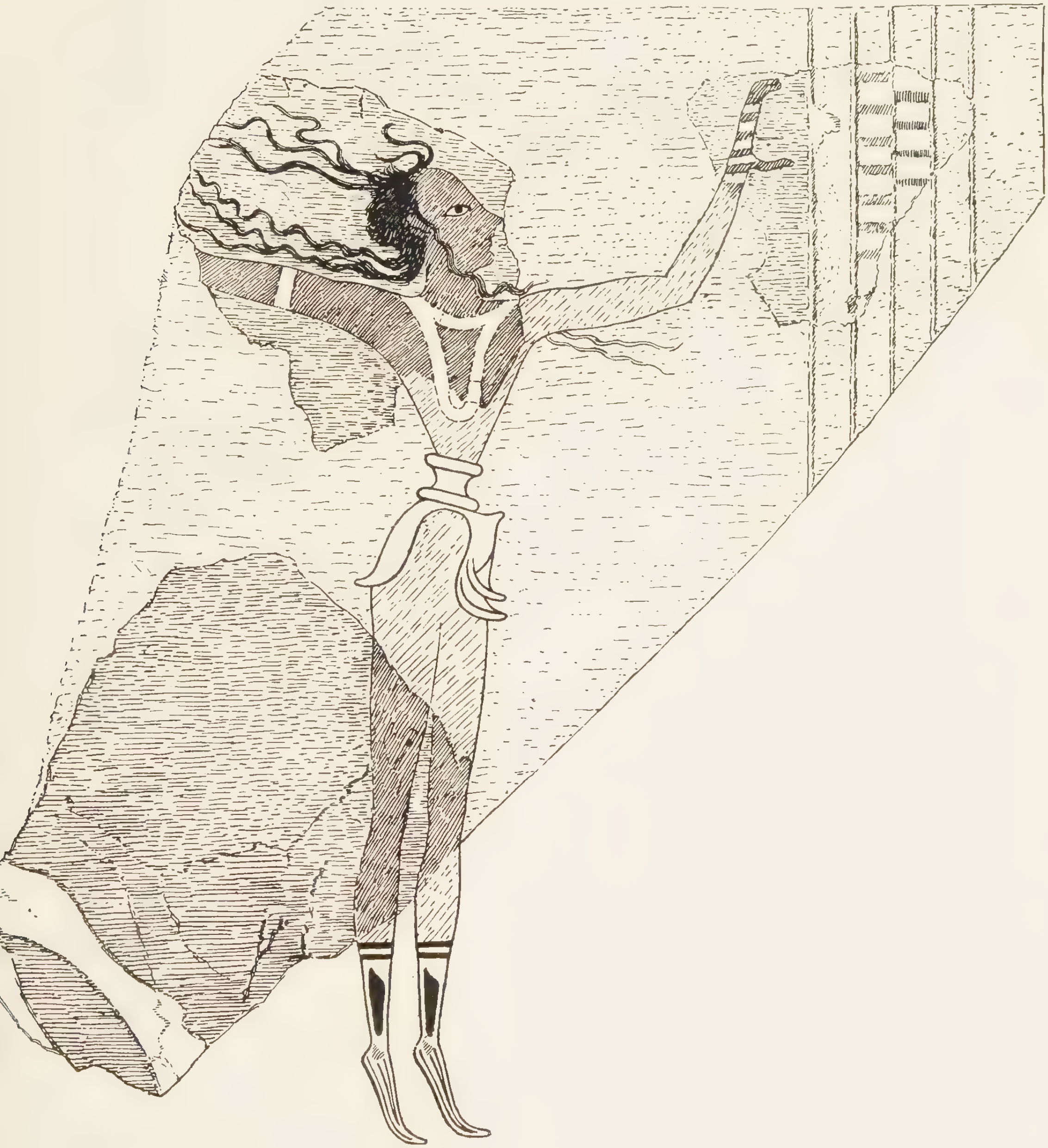


FIG. 148. MALE TAUREADOR IN THE ACT OF ALIGHTING.

side of the sport, as occasionally in the 'Wild West' of America to-day, has been shown from a scene on a Vapheio Cup,[1] but the elegance and ornaments of the female acrobats shown in the 'Taureador Frescoes' belong to a different sphere. The ribbons and beaded necklaces are quite out of place in rock-set glens or woodland glades. To the Palace circus they are more appropriate. The animals themselves were no doubt carefully trained. Like the bulls of the Spanish arenas they may often have been of established pedigree and reared in special herds or *ganaderias*. It is clear that in all these scenes the attention of the Minoan artist is largely centred on the animal itself, which is rendered of disproportionate size, as befitting what was to them evidently quite as much as the lion, the King of Beasts.

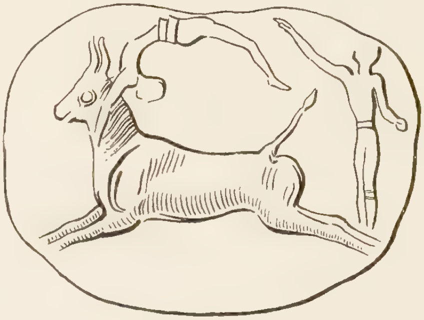


Fig. 149. Acrobat Executing Back-somersault, to be caught by Figure behind. Temple Repository, Knossos.

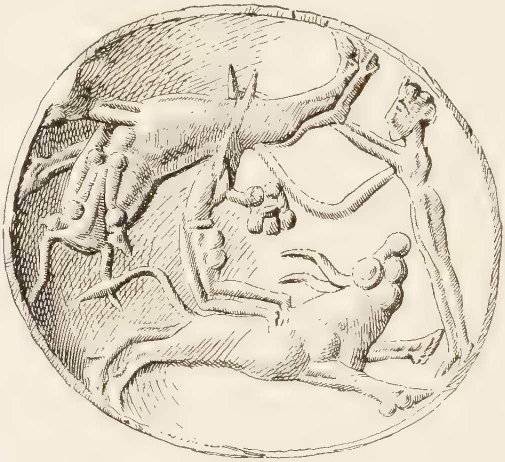


Fig. 150. Analogous Scene to above. Agate Intaglio.

Tumbler caught by female attendant.

That the particular feat, in which a tumbler executes a back-somersault over the bull's body to be caught by another performer behind, already formed part of the programme of the shows before the close of the Third Middle Minoan Period is attested by a clay sealing found in the Temple Repositories (Fig. 149). A figure here turns a somersault from the beast's neck while a second behind, apparently intended for a girl, raises an arm as if to catch the other. On an agate intaglio,[2] of somewhat later date (Fig. 150), we see a curious version of a similar scene as adapted to the filling of a circular space. There are here two galloping bulls, over the back of one of which the youth turns a somersault, in this case facing towards the bull's tail. The figure behind, in which again we may recognize a girl, is placed upside down, owing to the exigencies of the circular border, and has the appearance of standing in front of the other charging animal. She holds out both hands, however, in the same manner as the figure behind the bull in the fresco (Fig. 144).

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[1] See above p. 182 and Fig. 123, A.

[2] In my collection. The stone was bought in Athens and said to have been found in the Peloponnese.

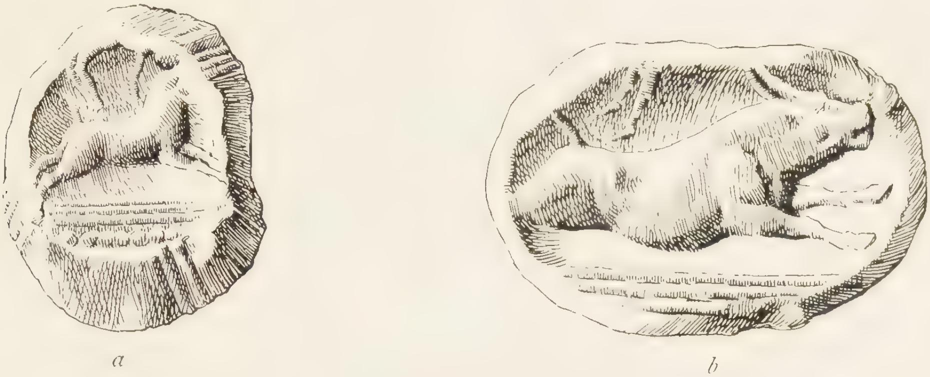

Fig. 151. Acrobatic Figure landing on Bull's Hind Quarters. Clay Sealings, Zakro.

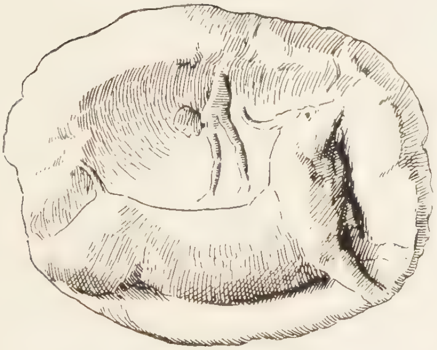

Fig. 152. Acrobat landing with His Hands on Bull's Back. Clay Sealing, Zakro.

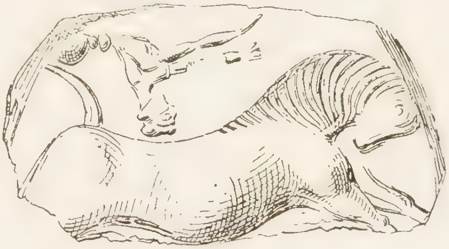

Fig. 153. Figure turning Back-somersault over Bull's Back. Clay Sealing, 'Corridor of the Bays', Knossos.

Analogous bronze group from Crete.

The acrobat turning either a back-somersault or a somersault with his face towards the animal's tail occurs on a series of intaglios and sealings. At times the performer is about to gain renewed purchase off the bull's hind quarters (Fig. 151, *a*).[1] In another case he lands hands forward (Fig. 152). In Fig. 153 he is starting on a further revolution. A very fine example of this class is to be seen in the design of a gold signet-ring (Fig. 154), recently discovered in a chamber tomb near Arkhanes, a country town South of the site of Knossos.[2] This, indeed, has a double interest not only as showing in front of the bull a 'Sacral Knot', which brings the performance into a religious and ceremonial relation, but as indicating beneath the animal, here depicted at a flying gallop, a stepped base with isodomic masonry. This feature, according to the conclusion drawn from other similar cases, points to a painted stucco original, perhaps in relief, on the walls of some building.[1]

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[1] Figs. 151, *a*, *b*, 152, 153 are reproduced from *P. of M.*, i, p. 686, Fig. 504, *a–d*.

[2] See my *Ring of Nestor, &c.*, p. 6 (Fig. 5). According to information received the ring was found by a woman in what she called a 'spelios'—a word generally applied by Cretan peasants to chamber tombs in the rock (A. E. Collection).

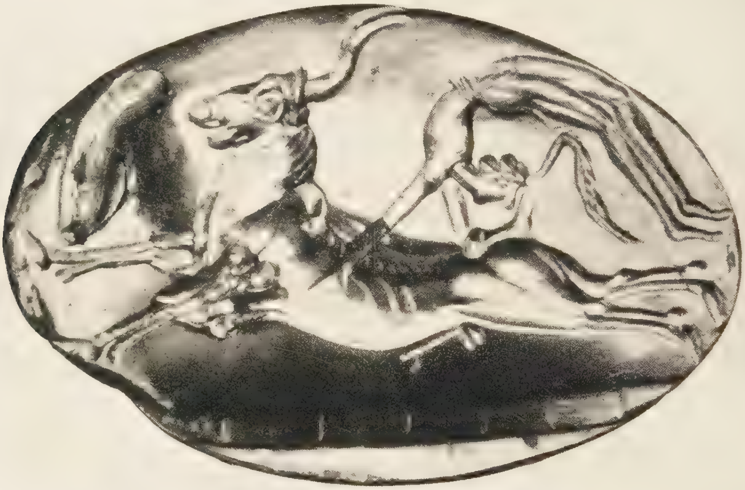

Fig. 154. Gold Signet-ring from Arkhanes. ($\frac{5}{2}$)

But the most remarkable illustration of such feats has now been supplied by the bronze group from Crete in the Collection of Captain E. G. Spencer-Churchill.[2] It has been already referred to above in relation to the silver figurine of a galloping bull borne by a tributary from Keftiu in the wall-painting of the Tomb of User-Amon at Thebes.[3] This, like another representation of a standing figurine of a bull shown among these tributary gifts, attests the high esteem in which the contemporary works of Minoan toreutic Art were held by the Egyptians.

The bronze group is here shown in the restored drawing, Fig. 155, where the legs of the acrobatic figure are slightly completed. That this represents a youth and not a girl is clear from the absence alike of formal curls or of any signs of pectoral development. The bull is splendidly modelled and the whole group, cast solid in one piece, represents the acme of Minoan metallurgic art. It is noteworthy, however, that to simplify his task the craftsman has stumped off the boy's arms at the elbows and that his head is supported in its bent-back position by the attachment of his thick flowing locks to the upper part of the bull's forehead. It was necessary to resort to this expedient to give a second support to the figure of the boy, supposed to be in the act of revolution and gaining a purchase from the animal's back by means of his feet. The hands had already released their hold of the horns and the arms could not therefore be legitimately used for attachment.

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[1] On the graduated bases seen on Minoan intaglios and their significance, see *P. of M.*, i, pp. 687, 688.

[2] With Captain Spencer-Churchill's kind permission this figurine was published by me in *J. H. S.*, xli (1921), p. 247 seqq. Nothing more is known as to its provenance than that it was brought from Crete.

[3] See *P. of M.*, ii, Pt. II, p. 648 seqq., and Figs. 413 *a*, and 416.

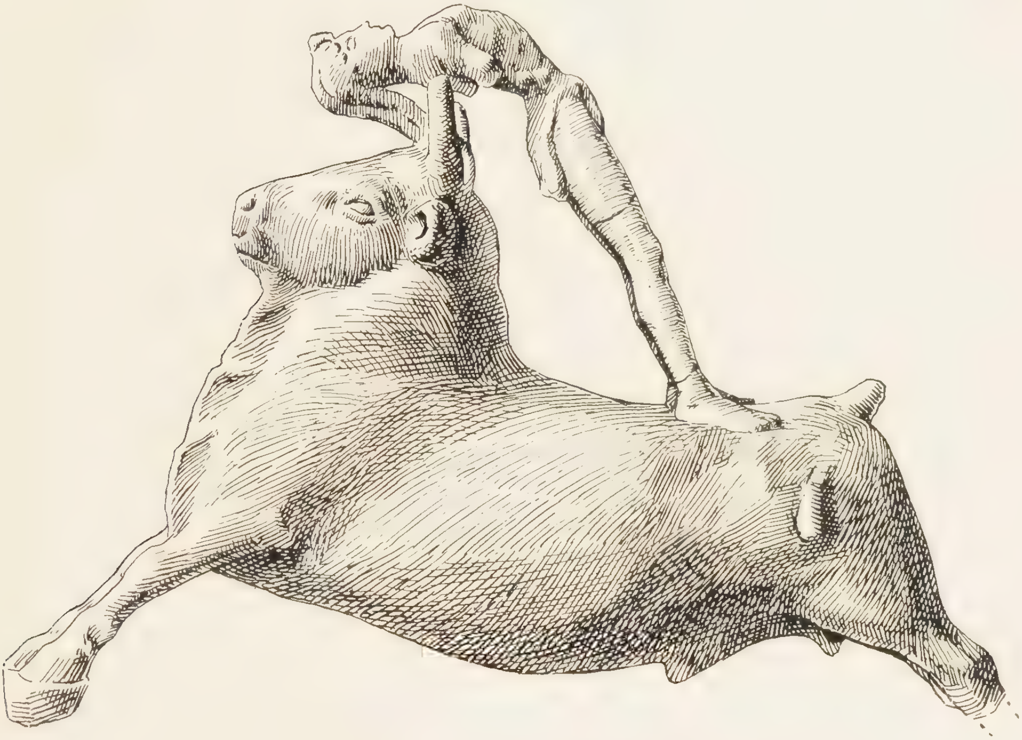

FIG. 155. BRONZE BULL AND ACROBATIC FIGURE: CRETE, M. M. III.

Acme of Minoan metallurgic art.

At the same time the arms, with a backward direction after losing contact with the bull's head, would have crossed the line of the connecting stem formed by the youth's hair, and this complication of the design was clearly beyond the artificer's powers. He therefore solved the difficulty by stumping off the arms at the elbows.

The idea of the performance as here conceived by the modeller of this bronze group seems to have been essentially the same as that of the fresco painter who executed the original of Fig. 144. This design, indeed, fits on to the whole series of gem types such as those illustrated above and involving three separate actions—the seizure of the horns, the landing over the head, and the final somersault behind, where timely assistance is rendered by an attendant figure.

Diagrammatic sketch of acrobat's evolutions.

The first part of this acrobatic cycle, as thus logically conceived, has rightly been shown to transcend the power and skill of mortal man. It may be yet worth while here to repeat a diagrammatic sketch showing the successive evolutions of the acrobatic performer as they seem to have been imaged by the Minoan artist[1] (Fig. 156). The first position is supplied by the female acrobat as shown on the fresco panel, Fig. 144, above.

(1) Shows the charging bull seized by the horns near their tips.

(2) The bull has raised his head in the endeavour to toss his assailant, and at the same time gives an impetus to the turning figure.

(3) The acrobat has released his grip of the horns, and after completing a back-somersault has landed with his feet on the hinder part of the bull's back. This is the moment in the performance of which a representation is attempted in the bronze group, but the upper part of the body is there drawn much farther back and dangerously near the bull's head, owing to the technical necessity of using the bunched locks of hair as a support.

In (4) he makes a final leap from the hind quarters of the bull—a risky plunge.

Was he caught, as the youth on the fresco, by the girl performer so conveniently posted? Or did he execute another back-somersault and land on his feet in the arena? In my diagrammatic sketch as first published the first alternative is suggested. But in the painted version the boy had begun his revolution apparently as he left the animal's neck and offered an easier catch for the standing figure beyond. On the whole, therefore, the supposition that the acrobat availed himself of the purchase gained by his feet on the bull's back to make a second back-somersault seems to be the more probable.

This stationing of an assistant in a coign of vantage within the arena to catch the flying performer—as illustrated both by the wall-painting and the intaglios—is itself a remarkable feature. How could such help at need be forthcoming at the exact place and moment required?

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[1] Executed for me by Mr. Theodore Fyfe. See, too, A. E., in *J. H. S.*, xli (1921), pp. 252, 253, and Fig. 5.

Some enlightenment as to this problem may perhaps be obtained when

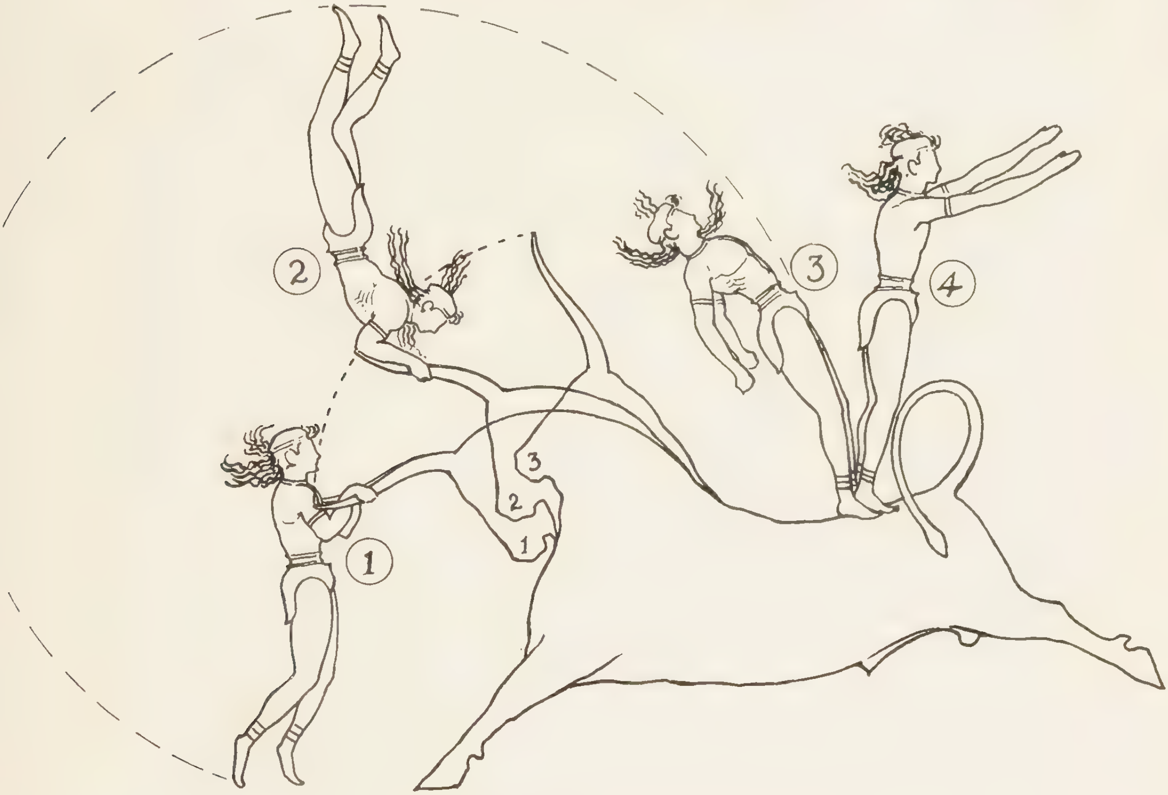

FIG. 156. DIAGRAMMATIC SKETCH OF ACROBAT'S COURSE.

we consider the probable character of the enclosure in which these circus sports took place. The traditional practice of Minoan architects leads us to assume that the walled or fenced enclosure surrounding the course would have been of rectangular shape. The 'theatral stands' of the fresco form an alignment and show no trace of curving round an arena. If not in a line with one another they must at least have formed sides of a rectangular space.

Probable arrangement: fenced oval enclosure within rectangular.

But the acrobatic sports themselves were the outcome of the adventurous drives of Minoan cow-boys along the country-side, and these, when restricted to an enclosed space, involved a round or, more probably, elliptical course—like the arena of a Roman amphitheatre, which was originally devised to exhibit *Venationes* or hunting scenes. It looks, therefore, as if according to the Minoan arrangement there may have been a building for the spectators either with a straight frontage or actually surrounding a rectilinear space—like the Central Courts of the Palaces[1]—coupled with an elliptical enclosure probably surrounded by a wooden palisade for the performances themselves. The Spanish Plazas show a space between the ring-fence of the arena and the actual front wall below the spectators—answering to the *podium* of the Roman Amphitheatre and giving them greater security.

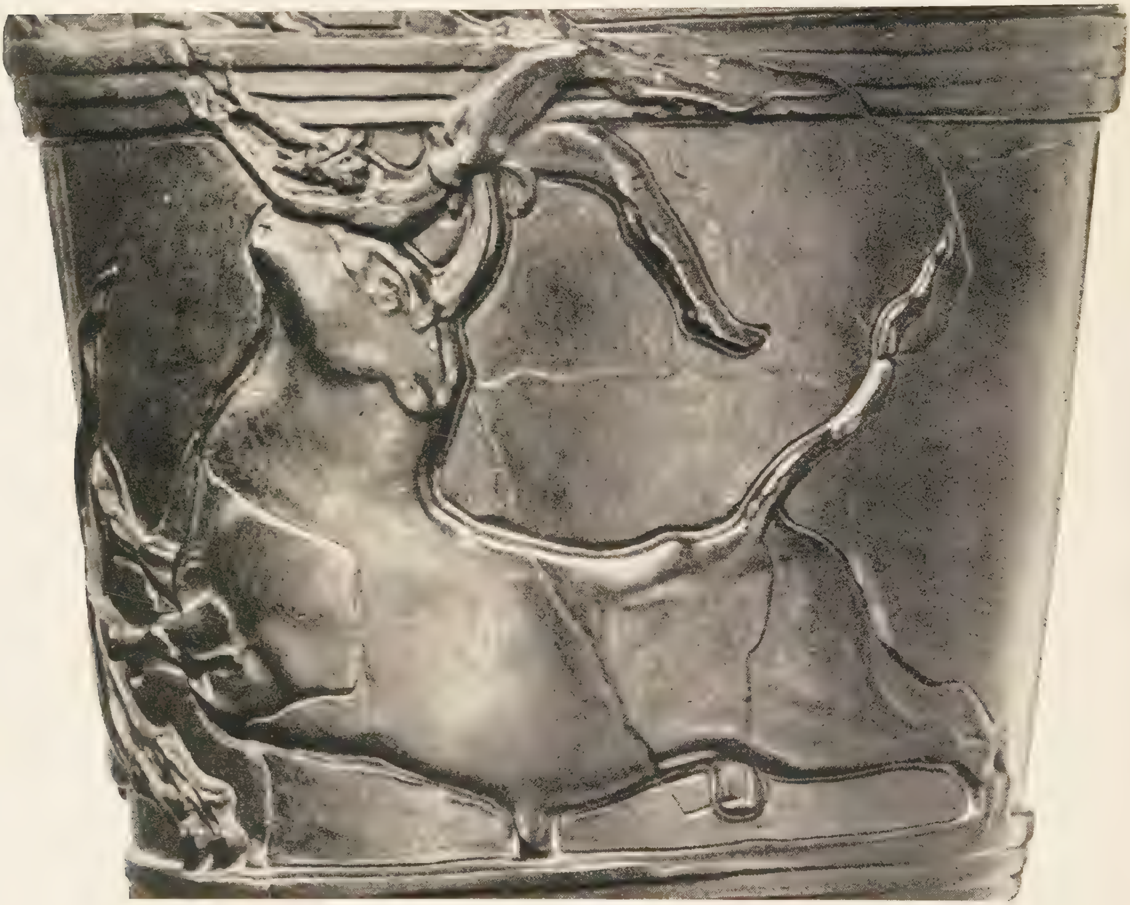

FIG. 157. ACROBAT BETWEEN HORNS OF BULL ON STEATITE 'RHYTON' FROM HAGIA TRIADA.

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[1] It does not follow that these sports as a rule took place in the Central Courts of the Palaces. The 'Grand Stands' as seen in the fresco suggest a special 'theatral' arrangement. If on occasion ceremonial shows of this kind were held in the Central Court of Knossos, opposite the little Pillar Shrine of the Goddess, a fenced enclosure must have been specially set up within the Court.

If, then, we may suppose that in the case of these Minoan shows there was an oval, fenced enclosure within a rectangular walled space, there would have been ample facilities for the entry of assistant performers, of the kind illustrated, by means of narrow openings at various points. They might have been posted for the purpose and could thence rush forward to catch the flying body of the acrobat at the critical moment.

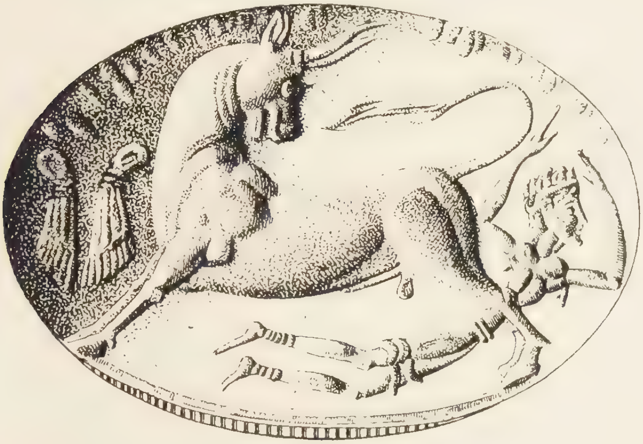
FIG. 158. SCENE OF *TAUROKATHAPSIA* WITH 'SACRAL KNOTS', ON SIGNET-RING FROM SMYRNA.

Dangerous aspect of sport. Overthrown performers.

But the whole performance was at the best a dangerous sport. That, whether as practised in the open country or in the closed arena, a considerable amount of risk attended these acrobatic feats, is clear from the records that have been preserved to us. The thrown cow-boy on the Vapheio Cup in a helpless plight with his arms stretched out behind him, and incapable even of the endeavour to break his fall, finds his counterpart on more than one intaglio design. What seems to be the immediately antecedent episode occurs, indeed, on the conical steatite 'rhyton' from Hagia Triada where a figure, with outstretched arms that have clearly missed their grasp, appears between the horns of a charging bull (Fig. 157).[1] This example of the parlous plight of a performer in these sports has a special relevance, since the two pillars of the 'superposed' type, which serve on the vase as a frame for this sensational episode, must be taken, as we have seen, for an abbreviated rendering for the Grand Stand itself. It was part, therefore, of the spectacle of the Minoan arena.

On the signet-ring (Fig. 158)[2]—the subject of which, from the rocks above, belongs to the same class as the Vapheio example—the cow-boy, thrown on to the ground behind the bull, holds up his hands in a similar manner. On the gold engraved bead from the 'Thisbê Treasure', Fig. 159,[3] the prostrate youth has one arm bent under him as if to break his fall and holds the other to his head, as if to protect it. From the fact that he wears a belt but no loin-clothing we may perhaps infer that the discomfited figure is that of a comparatively young boy.[1]

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[1] The right forearm of the performer is here restored, together with the neck and part of the middle of the bull.

[2] Cf. *P. of M.*, i, p. 432, Fig. 310, *a*. Bought at Smyrna and said to come from its 'hinterland'.

[3] See my *Ring of Nestor*, &c., pp. 5, 6, and Fig. 3. The 'Treasure' represents the contents of several tombs.

The 'Sacral Knots' engraved in front of the bull in the two last examples show that they must be taken in a religious connexion. The youths laid low by the sacred animal had in a sense devoted themselves to the Minoan Goddess.

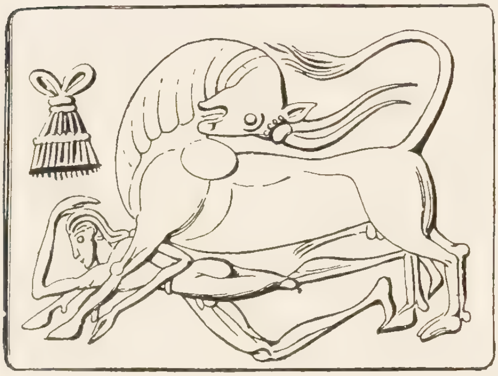

FIG. 159. YOUTH THROWN BY BULL ON GOLD BEAD-SEAL. THISBÊ. ($\frac{3}{1}$)

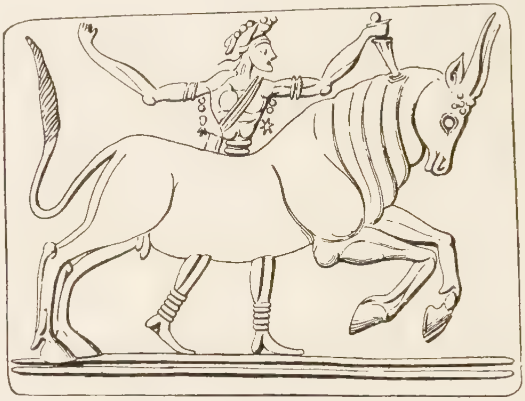

FIG. 160. SACRIFICE OF BULL. MINOAN *MATADOR*. ($\frac{3}{1}$)

'Sacral Knots' before bulls. Sign of consecration. Comparison with sports of Amphitheatre and Plaza. Spanish *Corridas* outgrowth of sports of Roman arena.

So far as our records of these ceremonial shows go, as described from the various sources above cited, their character was essentially acrobatic. They were full of thrills, however, and the Minoan onlookers of both sexes were stirred with much the same sensational uncertainty about the fate of the performers as once excited the Roman throngs in the Amphitheatre or that still hold breathless the spectators of the Plaza de Toros.

It must be borne in mind, indeed, that the Spanish *Corridas*, of their very essence, fundamentally differed from the Cretan shows. It seems to be generally agreed that they were themselves an outgrowth—influenced no doubt by indigenous Iberic or Celtiberian traditions—of the sports of the Roman arena. They belong essentially to the category of the *tauromachia* rather than the *taurokathapsia*, and the object was to first wear down and finally to kill the bull. Still, the catching and overthrowing of the sacred animal that seems to have been involved in the Cretan shows may itself

[1] *Ring of Nestor, &c.*, p. 6. His long locks stream behind him and he is entirely naked, except for the girdle, showing the sexual organs, an unexampled phenomenon in Minoan Art, except in the case of very young children. It occurs in the case of the boy-God illustrated below, p. 445, Fig. 308, and p. 451, Fig. 314.

have had a sacrificial sequel. A noteworthy scene on a gold bead-seal from the 'Thisbê Treasure', Fig. 160, shows an obvious resemblance to the closing episode of the *Corrida* in which the *matador* steps forward and dispatches the animal with a thrust of his sword.[1] In the Minoan design we see a performer with a sheath slung from his shoulder who, advancing from the side, sticks his dagger into the bull's neck. The official character of the personage who thus slaughters the beast is marked not only by the fact that he is thus armed, but by two otherwise unique features—he wears a wreath on his head and a kind of chain hangs down from his shoulders terminating in star-shaped ornaments. The whole is clearly a ritual act performed by some one fulfilling priestly functions.

Was there sacrificial sequel to Minoan sport?

Matador on Thisbê bead-seal.

Female performers devotees of Goddess.

It was no doubt the religious character of these sports—held under the immediate patronage of the Goddess, whose pillar shrine overlooked the arena,—that made it possible and even proper for girls, apparently of high degree, to enter the ranks of these highly skilled performers.

Signs of gentle birth.

Some of the female acrobatic figures here depicted—though otherwise attired in the ordinary manner of Minoan cow-boys—show, in fact, a special elegance in their ornaments and head-dressing; their locks are fashionably curled and they wear bright-coloured *bandeaux* above their foreheads. Not only are the upper parts of the arms encircled by broad armlets, but decidedly heavy necklaces hang down above their bosom, or, in the case of the Coloured Plate XXI, above the hollow of the back. The elaborate *coiffure* of the girl grappling with the bull's horns on the Vapheio Cup has already been noted.[2] These girl performers were surely of gentle birth.

Precedence of women in Minoan Society.

Women among the Minoans, as is well illustrated by their occupation of all the front seats of the Grand Stands, took the higher rank in Society, just as their great Goddess took the place later assigned to Zeus.

Princes and Grandees participating in Spanish bull-fights compared.

Mutatis mutandis, then, it is allowable to compare their participation in these sports of the arena that needed such skill and strength with the appearance of personages of the highest rank as protagonists in the Spanish bull-fights. Moorish princes had adopted the native custom, and the lists of their arenas, as of that at Granada, were already famous. The Cid Campeador, who took over the sport from his 'paynim' predecessors in Southern Spain,[3] is traditionally said to have played his part as a champion in the arena. The prohibition of the sport, as barbarous, by Queen Isabella of Castile was powerless to suppress it. Later on stands out the historic episode of Charles V killing a bull with his lance in the *Plaza* of Valladolid in 1527, on the occasion of the birth of his son who was afterwards to reign as Philip II. The Spanish Grandees, encouraged by the succeeding sovereigns, continued to show a great fondness for the sport. Their participation in it, however, fell under the severe disapproval of Philip V, and from the close of the seventeenth century the professional element became gradually predominant among the *taureadors.* In a very different spirit was framed the old Spanish law that deprived of rights of citizenship the man 'who, for money, should fight against a brave beast'.[1]

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[1] The classical Spanish stroke, however, was above the shoulder-blades, so as to penetrate between the joints. The Minoan *matador* of Fig. 160 strikes at the cervical vertebrae.

[2] See above, p. 182.

[3] Goya, who had himself exercised his bodily strength and agility in the arena, in 1815 published a series of copper-plates to illustrate the Spanish 'Tauromachia' (*l'arte de lidiar los toros*). In these it is noteworthy that after one

Chevaleresque sanction in Spain as religious in Crete.

What the religious association had induced in ancient Crete was fostered in medieval Spain by the spirit of chivalry that led the Grandees to enter the lists against the noble animal. In Spain, indeed, as chevaleresque notions died out, and when the nobles had been forbidden to participate, the sport passed completely into the hands of professionals.[2] But it had become a national institution, and Spanish chronicles celebrate a long list of famous *toreros.* In its minor aspects, moreover, down to quite modern times, it was supported by the example of aristocratic champions, who even included royal ladies. As late as 1893, in a trial show, or *tentadero*, of two-year old steers on the Sevillian *Vegas*, the Infanta Eulalia rode *a ancas*, or pillion fashion, with an Andalucian nobleman, while the Condesa de Paris and her daughter Princess Hélène are recorded to have each overthown a sturdy two-year old.[3]

In the Minoan and Mycenaean World generally the bull-grappling shows seem to have followed the fate of the whole culture, together with the religious traditions of which they were so indissolubly bound up.

Only in Northern Greece a link with the past was still preserved—

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scene recording primitive Iberian *toreros*, he executed others depicting bull-fights under the Moorish princes. His Spanish series begins with the Cid Campeador and includes Charles V. Bull-fighting had been prohibited under Godoy, but King Joseph, Napoleon's brother, could not resist the popular clamour for the *Circenses.* It is a sign of the times, however, that in the Douce copy of Goya's work (in the Ashmolean Museum) its title (in MS.) is followed by the remark 'Barbara diversion ! Esta es la voz del Publico racionale, religioso e illustrado de España.'

[1] 'El que por dineros fuese à lidiar con una bestia brava', where the last phrase would cover any wild beast of the arena (see E. Dufourchet and G. Camiade, *Les Courses de Taureaux en Espagne et France* in *L'Aquitaine historique et monumentale*, i (1890), p. 168).

[2] See, for instance, de Bedoya, *Historia de Toréo* (Madrid, 1850).

[3] A. Chapman and W. Buck, *Wild Spain*, 1893, p. 64. I am indebted to the kindness of Professor Baldwin Brown for this reference.

Survival of Minoan *Taurokathapsia* in Thessaly in equestrian form.

under an altered form due to the use of the horse for riding purposes—in the feats of the Thessalian *taurokathaptae*.

Except for the convenient use of the horse in place of the coigns of vantage dear to the Minoan Cow-boys these feats were essentially the same. One of the particular objects of securing a good springing-off place had been to seize the bull's horns from above and to twist its head in such a way as to overthrow the mighty beast.[1] For this the Thessalian, mounted on his fine native steed, had a great advantage and it remained one of his principal *tours de force*. It is interesting to note, moreover, that this feat—which leads us on to the performance of the Spanish *sobre salientes*—entered into the programme of the Circus sports of the ταυροκαθάπται introduced by Claudius[2] and recorded in inscriptions.[3] The Thessalian riders first wearied the animals by driving them round the arena and then brought them down by jumping on them and seizing their horns, in the Minoan fashion, a method still practised in the 'Wild West' of America. At times the Thessalian horsemen actually broke the bull's neck by their sudden wrench.[4] The best illustration of these Circus sports is to be seen in the Greco-Roman relief from Smyrna,[5] in the Ashmolean Museum, illustrating a scene of 'the second day of the *taurokathapsia*'. The riders are represented as boys, wearing round the middle part of their bodies the leather bands, or *fasciae*, that distinguished the *aurigae* of the Roman Circus. The relief is photographically reproduced in Fig. 161. The feats here depicted, according to the expert authority quoted above, exactly answer to the throwing of steers in the modern 'rodeo'.

The Oxford Relief.

Parallel survival of earlier form of bull-grappling on foot.

The earlier practice, however, of tackling the bull on foot was still in Hellenic times a recognized form of the sport. On the obverse of fifth-century coins of Larissa and other Thessalian cities, though the national emblem, a galloping horse, is seen on the reverse, a youth appears on foot grappling with a bull's horns and head and endeavouring to overthrow it.

What, in this connexion, is specially noteworthy is that the Greek

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[1] See Figs. 162–4.

[2] Suetonius, *Claud.* 21 'Thessalos equites qui feros tauros per spatia agunt insiliuntque defessos et ad terram cornibus detrahunt.' Cf. Dio Cass. lxi. 9. According to Pliny (*H. N.* viii. 172), Caesar, as Dictator, first introduced the sport. The action of the ταυροκαθάπτης is described in detail by Heliodoros (*Aethiop.* x. 30), writing in Theodosius' time, and in an epigram of Philippos (*Anth. Pal.* ix. 543 Dind.). Cf. Max. Meyer (*Jahrb. d. arch. Inst.*, vii, 1893, pp. 74, 75). See my *Minoan Bronze Group, &c.*, *J. H. S.*, xli (1921), pp. 257, 258.

[3] *C. I. G.*, iii. 114.

[4] Pliny, *H. N.*, viii. 172 'Thessalorum gentis inventum est, equo iuxta quadrupedante cornu intorta cervice, tauros necare'.

[5] Chandler, *Marmora Oxoniensia*, ii, p. 58 (Michaelis, *Ancient Marbles, &c.*, p. 573, No. 136). See A. E., *J. H. S.*, *loc. cit.*

Heroic feats of kind in Greece traced to Minoan source.

traditions of the bull-grappling feats of Theseus and Herakles clearly acknowledge a Minoan source. It was at the behest of Eurystheus, King of Mycenae, that Herakles captured the Cretan bull, received by Minos from Poseidon. In the case of the Marathonian bull, the feat, according to the legend,—obviously out of regard for Athenian susceptibility—had been first unsuccessfully attempted by Androgeos, son of Minos, and its final achievement was reserved for the national hero, Theseus.

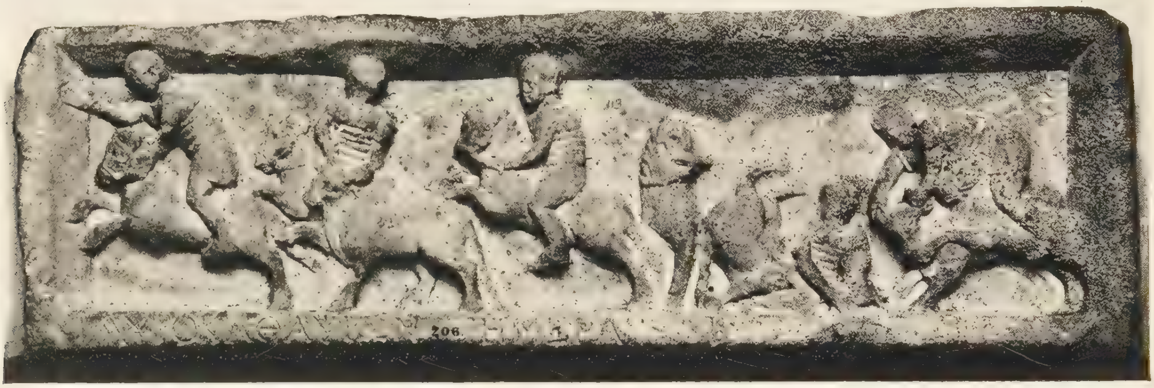

FIG. 161. GRECO-ROMAN RELIEF SHOWING THESSALIAN *TAUROKATHAPSIA* (ASHMOLEAN MUSEUM).

The metope of the Theseion, where the hero with superhuman might masters the Marathonian bull, finds its true forerunner in a series of intaglio scenes on Minoan gems. At times, as on the banded agate from Mycenae, Fig. 162, the wrestler seems to lift the monster from the ground. A favourite feat, as seen in Figs. 163, 164 A, is to seize the animal by a horn in one hand and the lower part of the jaw in the other so as to twist its neck.[1] On a clay sealing found in the Fifth Magazine (Fig. 163)[2] the champion wears the usual peaked helmet adorned, it would seem, with rows of boars' tushes, though in this case the design is somewhat marred by the barred ƨ countermark. On a green jasper lentoid (Fig. 164 A),[3] where we meet with another similar design, showing surpassing strength, the youthful performer is distinguished by an exceptionally prominent nose, recalling the proto-Armenoid profile of the

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[1] For the banded agate lentoid from Mycenae, Fig. 162, see Furtwängler, *Antike Gemmen*, iii, p. 49, Fig. 2.

[2] See A. E., *Scripta Minoa*, i, p. 43, Fig. 20. The back of the clay sealing bears an inscription of the Linear Class B.

[3] Drawn for me by Monsieur Gilliéron. See, too, Perrot, *Grèce primitive*, vi, Figs. 426, 24; Furtw., *loc. cit.*, Fig. 27; A. Reichel, *Ath. Mitth.*, 1909, Pl. II, 5; and cf. A. E., *J. H. S.*, xli, p. 259, Fig. 12 and note 26.

Minoan Priest-king on an earlier seal-impression. This feature, indeed, may have a real significance when taken in connexion with the evidence already cited for the Oriental source of this whole class of sports. Was there, perhaps, a special caste of such bull-wrestlers and acrobats belonging to the old Anatolian stock?

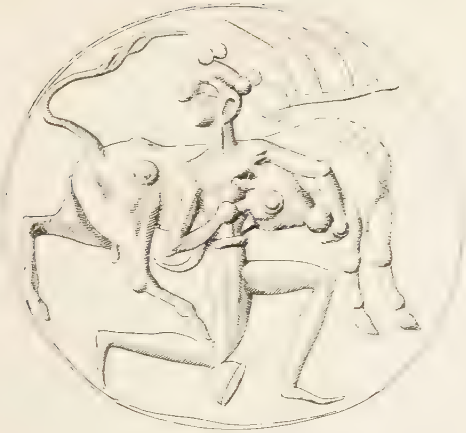

Fig. 162. Banded Agate Lentoid: Mycenae.

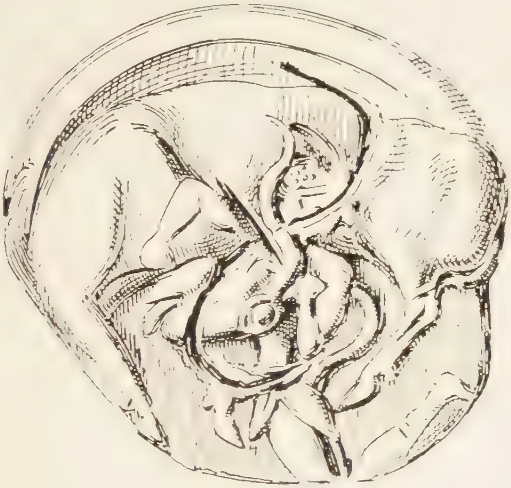

Fig. 163. Clay Sealing: Fifth Magazine, Knossos.

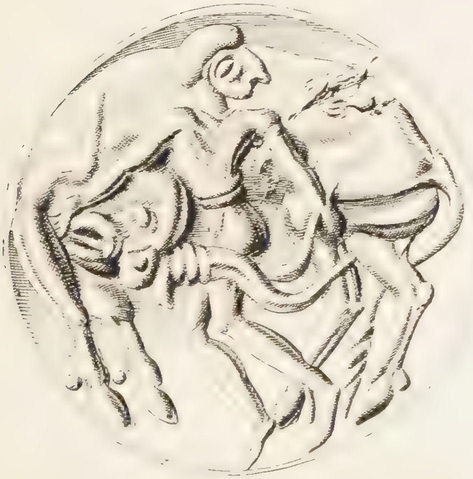

Fig. 164 a. Green Jasper Lentoid: Mycenae.

Absorbing attachment of Minoans to bull sports

It has been said of bull fights that they are 'in the Spanish blood'. The constant recurrence of these bull-grappling scenes in paintings and painted reliefs on the walls and miniatures of porches and porticoes, Palace halls and anterooms, as well as in the shrines of the divinity—in miniatures on crystal plaques, in repoussé designs and small reliefs on ceremonial vases, as a frequent type of intaglios and signet-rings—shows how absorbing was the interest that these sensational episodes excited in Minoan bosoms. That there was blended with this something of the fierce emotions that appealed to the spectators in the Roman Amphitheatre or the Spanish *Plaza de Toros* is probable enough. But the Cretan spectacles, even though they included this element, were on the whole devoted to the exhibition of sport and skill, and the performers — except perhaps for some act properly of a sacrificial kind—were not, as in the other case, out to kill, though often knocked out themselves.

Attitude of Roman and Spanish spectators compared and contrasted.

Reaction of monumental remains on Greek tradition.

That the painted reliefs of bull-grappling scenes such as those that remained in part at least in position above the Northern Entrance Pas-

But false idea of 'captive' performers.

sage at a time when the Greek settlement was already in existence may have left their impress on later traditions of the Minotaur and of the captive boys and girls is itself, as already suggested, by no means improbable. But there is no reason to go further than this and to suppose that the acrobatic figures of either sex engaged in these dangerous feats actually represent captives, trained like the Roman gladiators to 'make sport' for Minoan holidays. Still farther are we here away from any comparison with the primitive and more ferocious custom, illustrated by the monuments of prehistoric Egypt, in which prisoners of war were exposed to wild bulls.

The youthful participants in these performances,—like those of the boxing and wrestling bouts, that can hardly be separated from the same general category,—have certainly no servile appearance. They are, as we have seen, elegantly tired, and, especially in the hand-to-hand contests to be described below, often of noble mien. In these champions of either sex we must rather recognize the flower of the Minoan race, executing, in many cases under a direct religious sanction, feats of bravery and skill in which the whole population took a passionate delight.

The lithe sinewy forms of those engaged in the sports of the Minoan arena, with their violent muscular action and conventionally constricted waists, were as much the theme of the contemporary artists as were the more symmetrical shapes of her *ephebi* to those of classical Greece. In both cases it was the glorification of athletic excellence, manifesting itself in feats of which the Gods themselves were witnesses. So, too, the participation of women in the Minoan bull-grappling scenes can by no means be regarded as a symptom of bondage or of a perverse tyrant's whim. It was rather, as we have seen, the natural outcome of the religious organization in which the female ministers of the Goddess took the foremost place in her service. At Sparta, where the Minoan religious tradition seems to have had a considerable hold, girl athletes continued to take part in the public games.

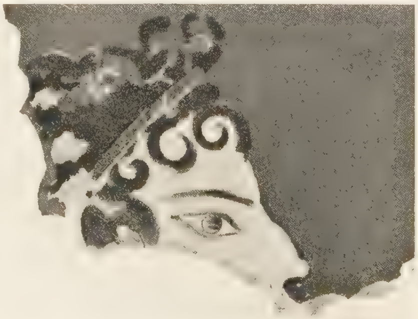

FIG. 164 B. FRAGMENT OF HEAD OF FEMALE *TAUREADOR*. (See p. 212.)

§ 78. THE EAST POSTERN AND BASTION: RUNNELS WITH PARABOLIC CURVES—CHRONOLOGICAL PLACE OF THAT BY EAST STEPS OF 'THEATRAL AREA'.

'Court of Stone Spout' and Old Frontage line of N.E. 'Insula'; Stepway down East Slope; Four lines of massive exterior walls; East Postern—its relation to Bastion; Recess for Warder; Staircase down E. Bastion with descending runnel; Fall of water controlled by parabolic curves; Extraordinary evidence of hydraulic knowledge; Settling basin and further course of runnel; Presumed tank for washing linen; A second staircase; Faintly incised signs on blocks—M. M. III b *date; Stepway with similar runnel South of 'Domestic Quarter', overlying M. M. III Magazines; Further chronological materials; Similar descending runnel by East steps of 'Theatral Area'; New stratigraphic results regarding this Area; Painted Pottery with racquet and ball motives—of Senusert II's time; Section beneath the East steps—runnel of M. M. III* a *date.*

'Court of Stone Spout' and Stepway down to East Bastion.

IT has been shown that the 'Taureador Frescoes' were originally displayed in a structure adjoining, on an upper terrace level, the South-West corner of the little Court that has received its name from the stone spout projecting from its Western wall, and by which the water from the 'East Hall' light area had here found its way to a blind well.[1] The structure in question may have also partially overlain the area occupied by the so-called 'School Room' above the floor of which, on the West side, several of the painted stucco fragments were found.

The 'School Room' itself, as we shall see,[2] represents a later adaptation of a fore-hall or vestibule of a corridor that brought the Court into connexion with the fine architectural complex of the 'Domestic Quarter'.

On its Northern side this little Court gave access to a stepway leading down the slope and finding its exit in the 'East Bastion' below. It thus afforded access to the comparatively level tract, with its ancient olive grove, bordering the stream beyond, already referred to as an ideal site for the 'Dancing Ground of Ariadnê'. If the Minoan 'bull-ring' or arena, with its grand stands, also stood—as seems most likely—somewhere in the same direction, the choice of the 'Taureador Frescoes' to decorate the walls of a structure on the terrace level above may be thought, as already noted, to have had a special appropriateness.

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[1] *P. of M.*, i, p. 378 seqq. and p. 381, Fig. 276.

[2] See below, p. 266, and cf. *P. of M.*, i, pp. 366, 367.

The spacious passage-way—a Northern prolongation of the lower 'East-West Corridor'—and its fine vestibule, which linked the Hall of the Double Axes with this North-Eastern egress system, is itself a sufficient evidence of the importance attached to this line of communication in the Palace economy. (See Plan, Fig. 183, opp. p. 270.)

Its immediate objective, the small 'Court of the Stone Spout', is, as we shall see, bounded on its Northern side by remains of a Verandah [1] at the back of which there appear a fine plinth and orthostat of gypsum. These form part of a frontage line of which the foundations can be traced running Eastward down the slope. This once imposing structure, comparable with the earlier gypsum façade line West of the Central Court, and like it no doubt an inheritance from the Early Palace, formed, as already pointed out, originally a part of a distinct 'North-Eastern Insula' of the building.[2]

Old frontage line of 'N.E. Insula'.

Stepway down slope.

An opening visible in this line at the North-West corner of the verandah bordering the little Court (see Plan, Fig. 183, below) gave access to an interspace between this gypsum frontage line and a massive inner wall-line, of which, again, traces could be seen on the slope above and below the opening referred to. Although the steps themselves have disappeared, there can be no hesitation in concluding that this interspace marked the course of a stepway descending the slope from West to East. As a mere matter of practical convenience it was in fact found necessary to replace the steps, thus to a certain extent restoring to it the original appearance of the staircase. It was, however, slightly broader, the exact width of 1·35 metres being given by a landing-block preserved at the top of the flight.

A prolongation of its upper course would have brought this stepway into relation with the upper system of the Domestic Quarter and with the N.E. stairs leading eventually to the Central Court. On the South side, as we have seen, there was a direct line of access to the 'Hall of the Double Axes' and the light-well of the Grand Staircase.

But this cross-way of communication down the slope owed its chief importance to its relation with a postern gate of which we have indications in the lines of the Palace walling on the East side.

Four lines of massive exterior walls.

There is evidence that, as the successive frontage lines of the Palace on the East slope—themselves essentially of the nature of terrace walls—fell into a ruinous condition through seismic or other causes, they were replaced or backed up by others at a slightly lower level, the enceinte thus gradually widening out on this side. Four main lines of parallel walling—the two first a good deal inclined outwards—are, in fact, visible by the East

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[1] See below, p. 268.

[2] See *P. of M.*, i, p. 364, and cf. Plan opposite p. 203.

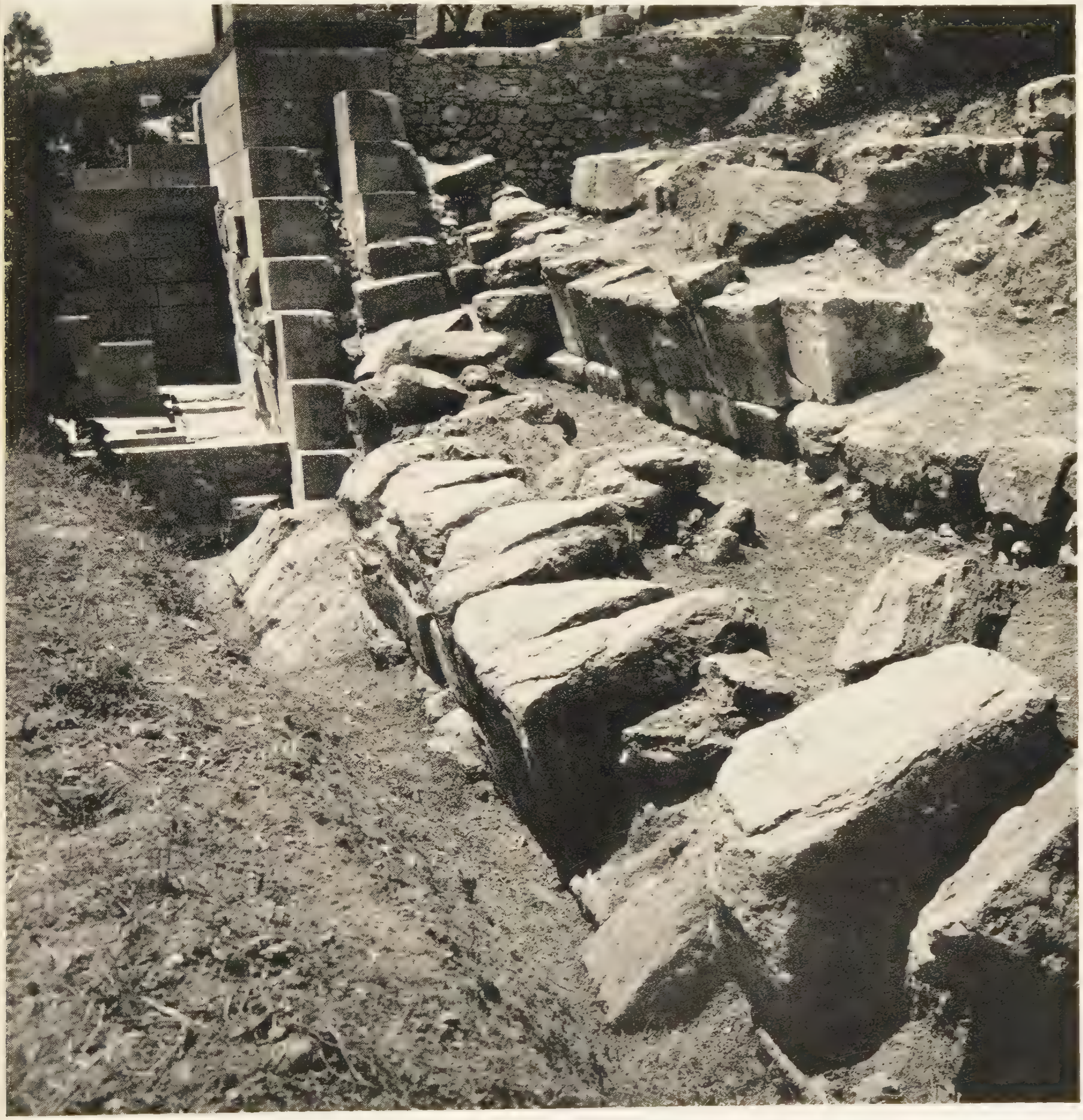

Fig. 165. View of Eastern Palace Enceinte and Bastion, looking South.

Bastion as shown in Fig. 165, and sections of these can be traced at intervals along a great part of the slope. (See, too, Suppl. Pl. XXXIV.)

It can hardly be doubted that a postern gate had existed in relation

East Postern its relation to Bastion.

with the stepway running down East from the earliest period in the Palace history. The arrangement of the gate itself may have varied in the successive stages of the building, and the evidence at our disposal only allows us to define its position in relation to the latest frontage line on this side. This, as we shall see, seems to have formed part of the extensive work of restoration carried out after the havoc caused by the great Earthquake that took place towards the end of the Middle Minoan Period,—the frontage, here marked by a bastion, having occupied a deep angle of the enceinte, is for that reason in many respects exceptionally well preserved.

The higher flight of the staircase which ascends this Bastion reached the upper terrace about 5·50 metres South of the line by which the stepway above described arrived at the same level in its descent Eastwards. This dislocation of the two lines of stepped approach is naturally explained by the intervening postern system. The connexion of the two by a short passage, running for about three metres North and South, was in fact brought out during the supplementary researches in this area made in 1929.

Recess for Warder.

The edge of the fine limestone blocks of an inner wall-line—the second in point of date—was found to be bevelled off along this section, with the evident object of resting the end of the pavement slabs of the passage upon the ledge thus formed, which terminates, indeed, at the point where the landing would have turned for the stairs ascending from the Bastion. At the lower end of these, moreover, a convenient recess is preserved which seems to have been carefully planned as a 'sentry box' or small lodge for a warder, such as by analogy we must infer to have existed at this Palace entrance (see restored Plan, Fig. 168). This space, which is of oblong shape, terminates East in the upper wall of the bastion, and we must suppose that on this side there was a window opening by means of which the warder would be able to overlook the outer stairs of approach below. As he would also command the postern doorway itself to the right and the ascending internal stairs the situation of the guardian could not have been better devised. A general view of the Bastion is given in Fig. 167 and Mr. Piet de Jong's restored isometric projection in Fig. 166.

Staircase down E. Bastion with descending runnel.

Three flights of limestone steps descended the Bastion, two of which and the intervening landings have been wholly or partly preserved. The other two flights, which were the uppermost, have been restored for modern convenience (see Plan, Fig. 168 and Fig. 167). The remarkable and distinguishing feature both of the stairs and of the slightly sloping paved landings was the system of stone channels and basins that accompanied them. This system, as will be shown, recurs in connexion with two other

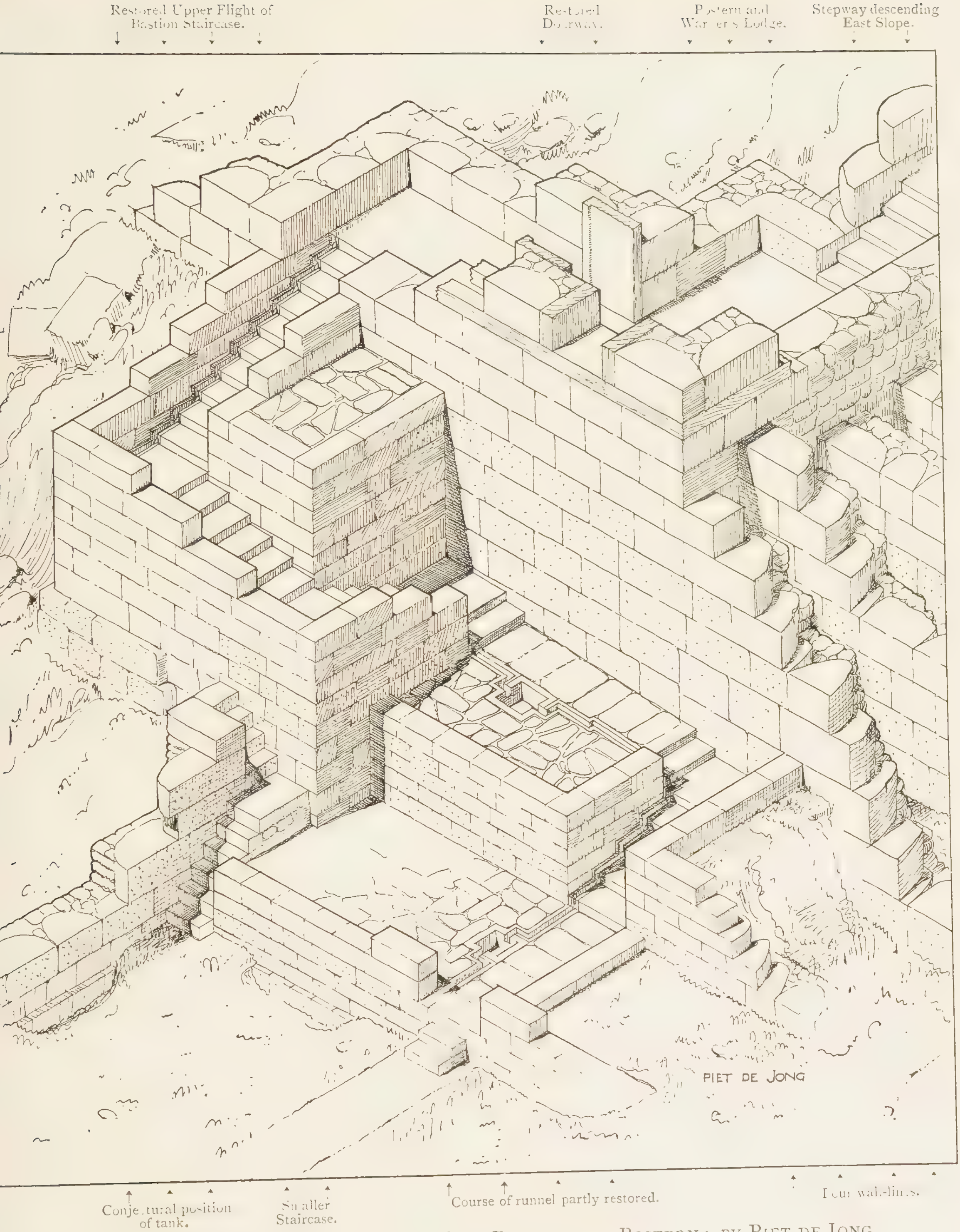
Restored Upper Flight of Bastion Staircase.
Restored Doorway.
Postern and Warder's Lodge.
Stepway descending East Slope.
PIET DE JONG
Conjectural position of tank.
Smaller Staircase.
Course of runnel partly restored.
Four wall-lines.

FIG. 166. ISOMETRIC PROJECTION OF EAST BASTION AND POSTERN: BY PIET DE JONG.

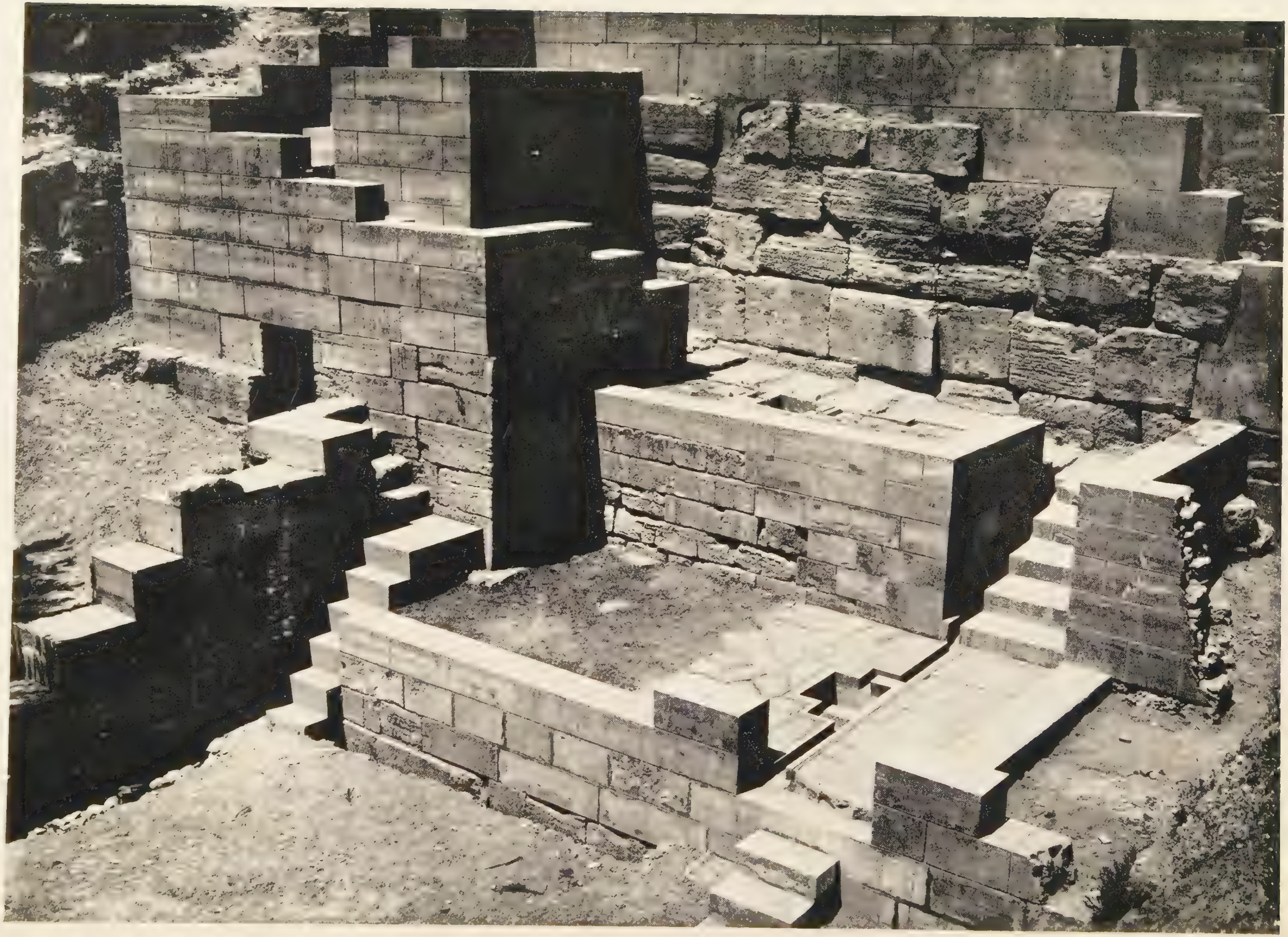

Fig. 167. Photographic View of East Bastion as restored.

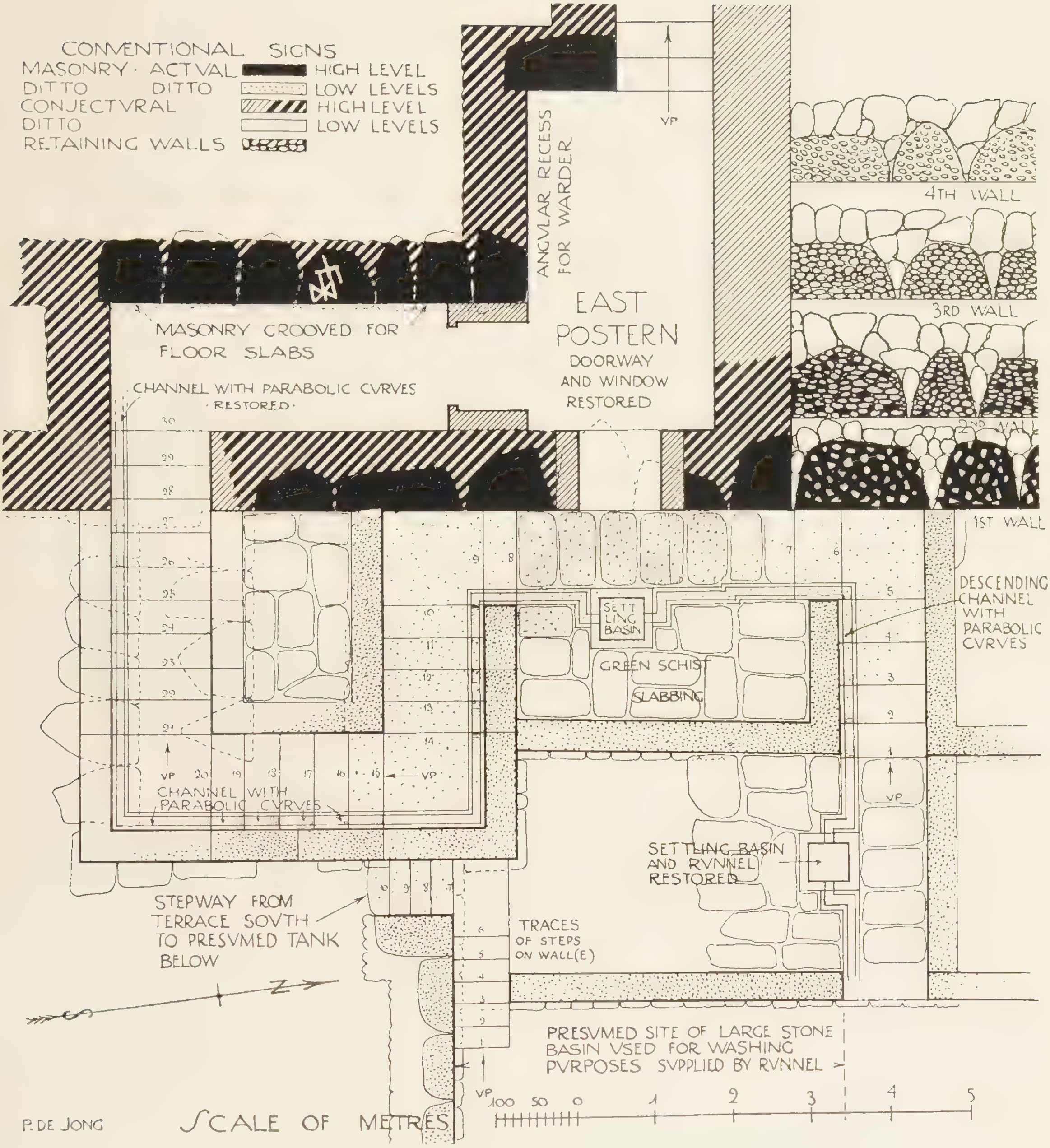
CONVENTIONAL SIGNS
MASONRY · ACTUAL ■ HIGH LEVEL
DITTO DITTO ▒ LOW LEVELS
CONJECTURAL ▨ HIGH LEVEL
DITTO ☐ LOW LEVELS
RETAINING WALLS
VP
ANGULAR RECESS FOR WARDER
4TH WALL
3RD WALL
2ND WALL
1ST WALL
EAST POSTERN
DOORWAY AND WINDOW RESTORED
MASONRY GROOVED FOR FLOOR SLABS
CHANNEL WITH PARABOLIC CURVES ·RESTORED·
SETTLING BASIN
GREEN SCHIST SLABBING
DESCENDING CHANNEL WITH PARABOLIC CURVES
CHANNEL WITH PARABOLIC CURVES
SETTLING BASIN AND RUNNEL RESTORED
STEPWAY FROM TERRACE SOUTH TO PRESUMED TANK BELOW
TRACES OF STEPS ON WALL(E)
PRESUMED SITE OF LARGE STONE BASIN USED FOR WASHING PURPOSES SUPPLIED BY RUNNEL
N
P. DE JONG
SCALE OF METRES
100 50 0 1 2 3 4 5

FIG. 168. PLAN OF EAST BASTION AND POSTERN: BY PIET DE JONG.

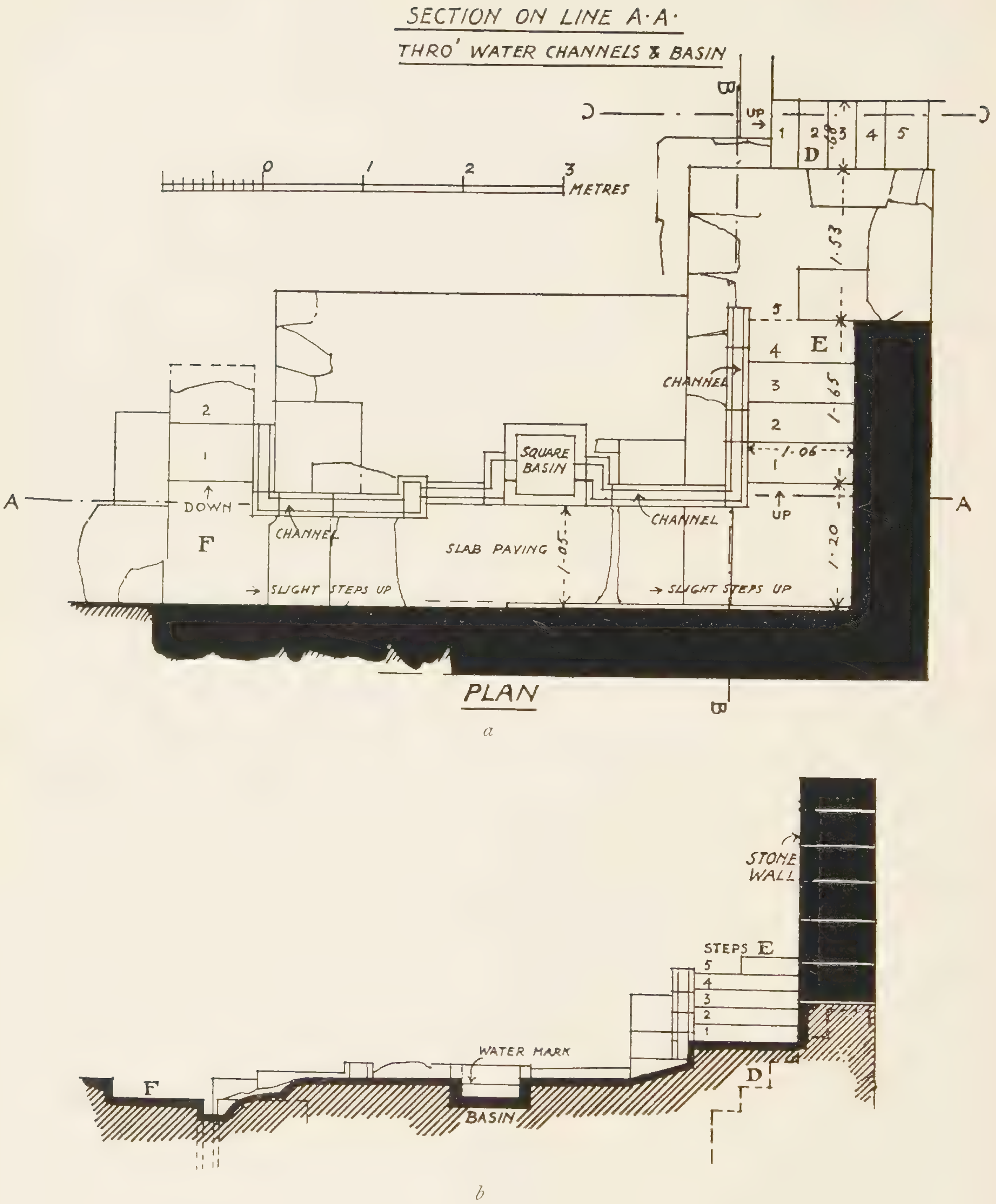
SECTION ON LINE A·A·
THRO' WATER CHANNELS & BASIN
B
UP
1
2
·68
3
4
5
D
0
1
2
3
METRES
1·53
5
4
3
2
1
E
CHANNEL
1·65
1·06
2
1
DOWN
A
A
SQUARE BASIN
CHANNEL
CHANNEL
UP
F
SLAB PAVING
1·05
1·20
SLIGHT STEPS UP
SLIGHT STEPS UP
PLAN
B
a
STONE WALL
STEPS E
5
4
3
2
1
WATER MARK
F
BASIN
D
b

Fig. 169 *a*, *b*. (*a*) Plan enlarged to six inches wide, and (*b*) Section at A of Staircase East of Bastion: by Theodore Fyfe.

stepped areas of contemporary fabric, but it here appears in its completest form and affords an extraordinary illustration of the skill of the Minoan architects in everything that concerned the passage of water.

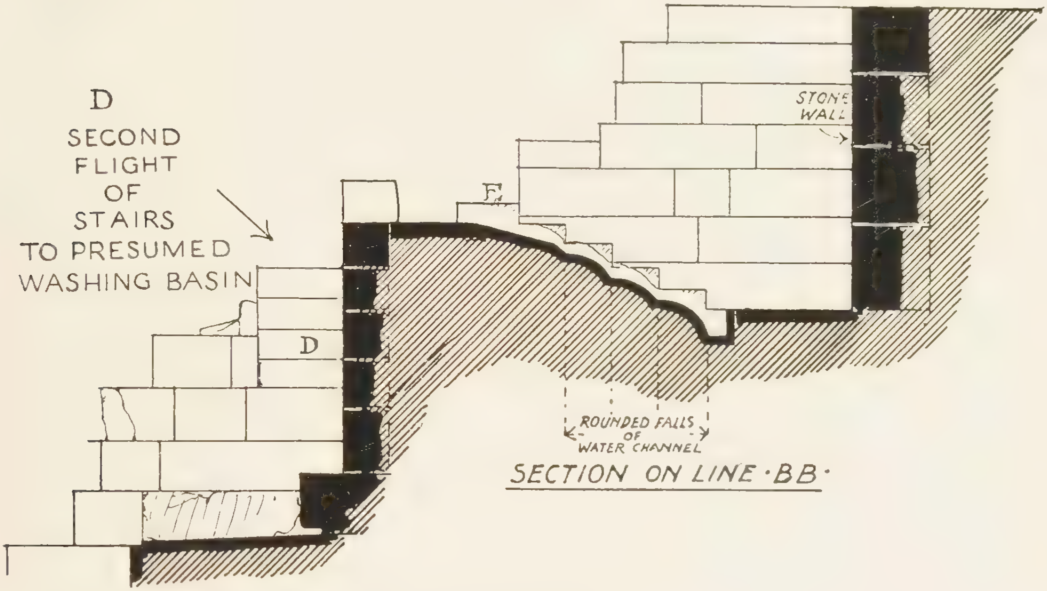
D
SECOND FLIGHT OF STAIRS TO PRESUMED WASHING BASIN
D
E
STONE WALL
ROUNDED FALLS OF WATER CHANNEL
SECTION ON LINE ·BB·
c

FIG. 169 *c*. SECTION B–B. OF STAIRCASE OF EAST BASTION: BY THEODORE FYFE.

We may infer that this system, the objects of which were the collection, scientific direction, and safeguarding from impurities of the rain-water from the successive flights and landings, began on the terrace level immediately outside the postern gate and at the head of the uppermost flight of stairs. These it must have followed in the same way as in the case of the succeeding sections of the staircase, but the preserved remains of the channel begin on the North border of the second flight.

Fall of water controll by parabolic curves.

As will be seen from Mr. Theodore Fyfe's original Plan and Section, Fig. 169, *a*, *b*, *c*,[1] the stairs were accompanied on that side by a channel compacted of limestone slabs the bottom of which formed a succession of rounded falls, one for each of the steps, of which there were originally six.[2] The steps themselves were 1·06 metres wide, the runnel beside them being 25 cm. The fall of the lowest curve is greater, since it was brought down to the bottom section of the channel that ran North at a right angle to this flight of stairs, along the landing backed by the enceinte wall. See Plan and Section, Fig. 169, *a, b, c*. A photographic view of the runnel at the North end of the middle platform of the Staircase is given in Fig. 170.

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[1] For these cf. *Knossos*, *Report*, 1902, Figs. 67, 68 (*B.S.A.*, viii), where I gave the first account of these discoveries, and p. 110 seqq.

[2] The curving section of the channel that accompanied the first step was wanting.

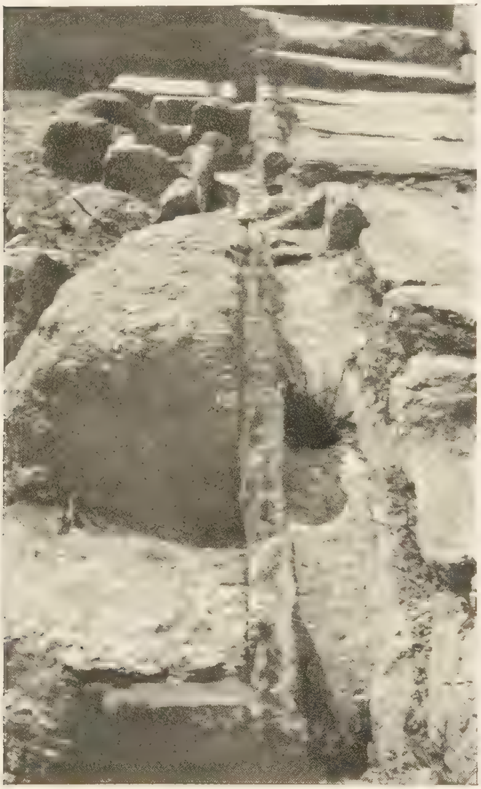

FIG. 170. PHOTOGRAPHIC VIEW OF PARABOLIC RUNNEL AT NORTH END OF MIDDLE PLATFORM OF STAIRCASE.

For enabling the current of water to pass round these and the other abrupt angles in its course without splashing over the pavement beyond, the retardation of its velocity by the curving course of the channel was a most efficacious method. The curves themselves almost exactly agree with the natural parabolas that the water falling down a slope of such an angle would execute, and the additional friction due to the increased length of its course necessarily diminish the speed. It has been calculated that the water reached the bottom of the flight with about half the impetus that it would have attained had it poured down the slope in a straight line instead of a series of leaps. The current thus reached the critical point—namely, the sharp turn at the foot of the flight—with such diminished force as to enable it to pursue its changed direction without shooting over its border.

Extraordinary hydraulic knowledge displayed.

The hydraulic science here displayed has surprised the most competent judges: it must, however, have been empirically acquired. Nothing, perhaps, in the whole building gives such an impression of the result of long generations of intelligent experience on the part of the Minoan engineers and constructors as the parabolic curves of these channels.

But this was not all. At the bottom of the flight where the runnel takes a sudden turn to the right it is deepened, with an accentuated slant to the bottom, so as better to accommodate the inrush of the current and to draw it away from the possible point of overflow.

The current at this point reached the central platform of the staircase, which has two slight steps at each end and a gently sloping pavement between, giving, in all, a fall of 20 centimetres in a length of five metres. Here, again, the regularization of the flow over the comparatively level surface was carried out with extraordinary hydraulic skill. While at the same time collecting an additional supply of water from the whole of the paved platform, which slightly slopes towards the channel, the main object here in view was to secure a certain local retardation of the current, favourable to the deposit of sediment in a shallow square basin beyond. The channel therefore, instead of proceeding directly to this, makes a double bend to check the velocity of the flow. Beyond the small catch-pit, which could itself be cleaned out when necessary, the channel is made to turn about in a similar manner so as to check the outward flow in the same way.

Settling basin.

Further course c runnel.

The runnel now, turning abruptly to the right, accompanied in the same parabolic curves another flight of six steps.[1] The evidence of the structural remains of the lower platform thus reached leads to the conclusion that from this point the runnel continued its course East to the outer base of the Bastion, following the same arrangement as on the platform above. It is thus shown in the restored plan, Fig. 168. The paved stepway descending from the Postern would itself have found its exit at the same point.

Presumed tank for washing linen.

It is clear that the water, so carefully collected and freed from deposit, was not intended to run waste, and it seems probable that it was conducted, perhaps by means of a covered conduit pipe, to a collecting tank which would have lain a little East of the outer wall-line on this side. The special fitness of rain-water for washing linen warrants the conjecture that the tank was used for this purpose, and Minoan Nausikaas may have made their way here from the Palace halls above.

A secon flight of descending step

That it was frequented from more than one side is further borne out by the appearance of a flight of small steps—70 centimetres wide, as compared with about a metre in the case of the other stairs—that descend the wall abutting at right angles on the South section of the bastion. These at first run North, but marks on the surface of the blocks, noticed by Mr. Piet de Jong during the re-examination of these structures in 1929, indicate that they then turned East, traces of five steps being clearly visible in that direction on the wall face, and seem therefore to have been devised to supply an access from the terrace level on that side of the Palace slope to the tank below. (See Mr. de Jong's isometric projection, Fig. 166, and the photographic view of the Bastion as restored, Fig. 167.)

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[1] Only two of the steps, together with the first of the corresponding curves, were preserved, but sufficient remains of the structure were preserved to enable its complete restoration as shown in Fig. 168.

The best existing clue to the place of this collecting basin seems to be the line of descent supplied by this lower flight, running Eastwards.

Late Signs on Blocks of East Bastion.

Faintly incised signs on blocks: M. M. III *b* date.

It is interesting to note with regard to the approximate dating of the Bastion and the connected system of runnels that trident signs appear on the blocks of its back wall and on the lower course of its central platform so faintly incised and comparatively small in dimensions that they may easily escape notice. These, indeed, present a striking contrast to an example of the same sign, boldly cut and of larger dimensions, seen on a block of the third enceinte wall of the slope behind the Bastion. The second wall—that immediately behind it—also shows large deeply cut signs, a star and trident, on two of its blocks and must be referred at least to the earlier part of the Middle Period of the Palace—not later than M. M. II.

As the result of a wide study the conclusion may be now affirmed that from the beginning of the Third Middle Minoan Period the signs on blocks already become somewhat superficially cut and inconspicuous. Those illustrative of its earlier phase, *a*, such as for instance on the Bastions of the Northern Entrance Passage and in the contemporary structure of the North-West Portico and adjoining area immediately West of this, of the 'Court of the Stone Spout' and many parts of the Domestic Quarter, are still sufficiently incised to catch the eye in a favourable light. But, succeeding this, is a later group—so attenuated as often to escape observation and almost to elude search—which must be referred to the later M. M. III stage (*b*), including its post-seismic phase.[1]

A good archaeologically dated example is supplied by the pillar of the South-East House with its single finely engraved Double Axe sign, in curious contrast to the well-cut examples of the Palace Pillar Rooms. On the limestone blocks of the light-area of this House both the Double Axe and the trident sign are repeated in the same almost invisible manner. Yet, as the remains of the fine naturalistic wall-paintings found within this house show, its construction certainly goes back within the M. M. III limits. In the present case there is every reason for supposing that the occurrence of signs of this very lightly engraved class mark the East Bastion in the form in which it has been preserved to us as a work of the great Restoration in the post-seismic stage of M. M. III *b*.

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[1] See note at the end of this Section.

Further Contemporary Remains of Runnels with Parabolic Curves in Connexion with Open Stepway South of Domestic Quarter.

Stepway with similar runnel, S. of Domestic Quarter

This conclusion is fully corroborated by a parallel discovery made in connexion with another open stepway. The structure in question is a great exterior flight of limestone stairs, traces of which are to be seen running up the slope immediately South of the Domestic Quarter, and which finally landed on the ascending gangway or ramp that entered the Central Court at its South-West angle.[1] The base slabs of two of the steps of this are seen *in situ* immediately East of the little 'South-East Bath-room', and, beside them, the remains of an identically constructed stone channel (see the photographic view in Fig. 171). These steps were 1·80 metres in width, or about double the mean width of those of the East Bastion, and the stone channel with its curving floor was correspondingly of larger dimensions.

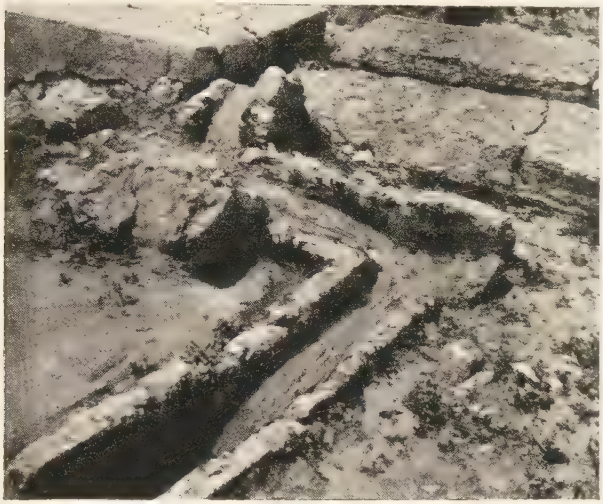

Fig. 171. Photographic View showing Remains of Parabolic Runnel by Open Stepway South of Domestic Quarter.

Over-lying the M. M. III Maga-zines.

For the chronological place of the stepway with which this remarkable feature was connected we have, happily, full and convincing data. In its upward course, immediately beyond the spot where the remains of the stone runnel are preserved, it passes over the adjoining M. M. III structures that were 'earthed under' after the great seismic catastrophe that took place towards the close of that epoch. The vases in this section of the older building were themselves left intact in the position in which they had been covered over. These included a very elegant painted clay bath with sprays of reeds in the little bath-room,[2] and the remarkable false-spouted jars in the Magazine beyond, while in the store-chest at the side of these stood the jars with the beautiful designs of clumps of Madonna lilies, white on the lilac-brown glaze ground.[3]

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[1] See General Ground Plan B at the end of Vol. ii, Pt. II.

[2] *P. of M.*, i, pp. 579, 580, and Fig. 424; and see, too, below, p. 386.

[3] *Ibid.*, pp. 576–9, and Figs. 420, 421.

All these vessels were in a practically intact condition and represent the ceramic stage that marks what may be regarded as the earlier phase of M. M. III *b*, otherwise so finely illustrated by the contents of the 'Temple Repositories'.[1] As, moreover, in so many parallel cases the associated deposit contained no pottery or other relics that could be referred even to the beginning of the L. M. I Period, the conclusion is thus inevitable that the staircase itself, the upper course of which had originally been laid over these filled-in spaces, and which itself forms an integral part of the plan of the Restored Palace on this side, was executed in what is best described as the 'post-seismic' phase of M. M. III *b*.

Further chronological materials.

In order further to test this result, during the supplementary researches carried out in 1929, I had the lower of the two undisturbed base slabs of the staircase, mentioned above, raised in order to analyse the underlying deposit. In the narrow interspace between this and the adjoining base slab part of the handle of a M. M. III cup was found wedged in, and from the thin underlying clay bedding were extracted eighteen small fragments of ordinary M. M. III pottery with a dark brown surface. No single later sherd was brought to light, and, taken in connexion with the evidence from the adjoining area, it is clear that when the stairs with this elaborate system of water channels with parabolic curves were built the M. M. III ceramic style was still in vogue. Beneath the clay bedding referred to was a limestone slabbing belonging to the earliest stage of the Palace, set almost immediately on a Neolithic surface that had been here cut down to.

East of the lower of the two base slabs the channel seems to have run under the pavement, taking here a skew turn which may have been found convenient in order to avoid some earlier block.

Earlier Example of Similar Parabolic Runnel by Steps of 'Theatral Area'.

Similar descending runnel by steps of 'Theatral Area'.

There is evidence, however, that the system of parabolic channels beside open flights of steps goes back to a distinctly earlier date than the 'post-seismic' M. M. III examples above illustrated, though the channels themselves were of different construction. The system, indeed, proves to be an inheritance from the earlier phase (*a*) of the Third Middle Minoan Period.

Along the Southern edge of the broad Eastern steps of the 'Theatral Area', and following the border of the Bastion that rises on that side, as well as that of the first section of the Southern flight beyond,[2] there are traces of a similar channel with a succession of parabolic falls, though in this case formed entirely of clay and plaster cement, the surface of which has been a good deal disintegrated. In conformity with the broad low steps the curves here were of more elongated form, and the remains give the appearance of a less fully developed stage in this method of constructing runnels.

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[1] *P. of M.*, i, p. 463 seqq. (Sections 23–5).

[2] This parallel was already noted in *P. of M.*, ii, Pt. II, p. 582.

What evidence then do we possess for the actual dating of this plaster channel, which cannot indeed be considered apart from the steps and bastion with which it is structurally connected?

Earlier chronological results regarding 'Theatral Area'.

Previous investigations, carried out by me in 1913, seemed to have established the approximate chronology of the earlier elements underlying this area. Chief among the results then obtained was the discovery of a walled round rubbish pit or 'Kouloura' of the same character as that of the West Courts both at Knossos and Phaestos, and probably of the same 'proto-palatial' date, marked by M. M. I *a* pottery. In this case the latest sherds forthcoming dated from M. M. II *a*,[1] at which epoch it was paved over, the massive pavement extending under the whole of the stepped structures to the East of it and for some 10 metres beyond and forming part of an early North-West Court, to which, as in the contemporary Court at Phaestos, an earlier form of stepped arrangement may have belonged. The conjecture then made that the existing Southern steps of the 'Theatral Area', more massive than those to the East, belonged to this early system has been since confirmed by the discovery of pottery beneath them not later than M. M. I *a*.[2] This early Court, moreover, was traversed from West to East by a correspondingly massive raised stone causeway, also of Phaestian character. This extension of the original Court looks as if there might have been an important stepway ascending from the Eastern Section to the North-West entrance of the Palace, which, together with the Portico and Lustral Area, had clearly at one time a greater importance.

There was, however, as has been already shown,[3] a second, remodelled Court with a paving about a metre above this, corresponding with the paved square of the 'Theatral Area', and running under its Eastern flight of steps and beyond at the same height above the earlier slabbing. This paving, as the sherds found immediately above it showed, had itself been executed before the close of M. M. II.[4]

These results, which it is necessary here to recall, were clear enough, but the date of the corner Bastion of the Eastern flight of steps itself and the connected water channel—though relatively later—was by no means so clearly ascertained, and their general attribution to the 'New Era' was really a matter of conjecture.

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[1] *Ibid.*, p. 580.

[2] Test of 1927.

[3] See Plan (Fig. 366), *op. cit.*, p. 587.

[4] *Op. cit.*, p. 581.

Investigations regarding Date of Channel by East Theatral Steps and Resulting Revelations as to Successive Historic Phases of that Area.

Section beneath E. steps and runnel.

In 1929 the question as to the date of the parabolic runnel here traceable brought home the necessity of further investigation, and I accordingly decided to raise the tenth slab of the Eastern flight of steps bordering its course, and to make a test excavation in the underlying materials (see Fig. 172 A).

The Section thus obtained (Fig. 172) proved to be one of the most interesting brought out on the whole site, and, while corroborating the earlier evidence of the existence of successive paved areas, supplied the solution of the particular points before us, in a somewhat unexpected manner.

The natural 'kouskouras' clay was struck at a depth of 2·82 metres below the surface of the tenth step, and it is best to record the data revealed by its superincumbent deposit in an ascending order:

Above the 'kouskouras' lay a deposit 1·52 metres thick. The sherds and other fragments found in this were much mixed including Upper Neolithic and Early Minoan. In the upper layer, immediately under the slabbing of the lowest pavement level brought to light, M. M. I *a* pottery began to be of frequent occurrence, and we may assume that the pavement itself belonged to the earliest age of the Palace.[1] This original 'North-West Court' may be described in the present connexion as System I.

Its pavement proved to be bordered by a square-cut water channel of the simple type with a level bottom.[2] This ran partly within the Northern line of the corner bastion, and, still further beneath this, were foundations belonging to an earlier structure.

Above the lower pavement, and between it and another intermediate between it and the tenth step, lay a deposit, 55 centimetres thick. In this space, together with dumped material containing some earlier elements, were a series of characteristic fragments of M. M. II *a* date.[3] Amongst

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[1] At the point where the test was made a part of the slabbing of this pavement was wanting, and the elements immediately above and below its level became slightly intermixed. This inconclusive result, however, was remedied by means of an excavation carried out immediately under the pavement where it was preserved, and the latest pottery brought out proved to be M. M. I *a*.

[2] At a depth of 13 cm. below the pavement to which this stone conduit belonged was a smaller similar drain of terra-cotta (see Section, Fig. 172) running somewhat skewly as regards the other. No definite stratification, however, could be made out in regard to it.

[3] Amongst these, together with smaller fragments of similar vessels, was the greater part of a cup with black glaze and white bands, like those associated with the 'Knobbed Pithos' (see above, pp. 23, 24 and Fig. 12, and cf. *P. of M.*, i, pp. 234, 235). The pieces with the 'racquet' decoration were

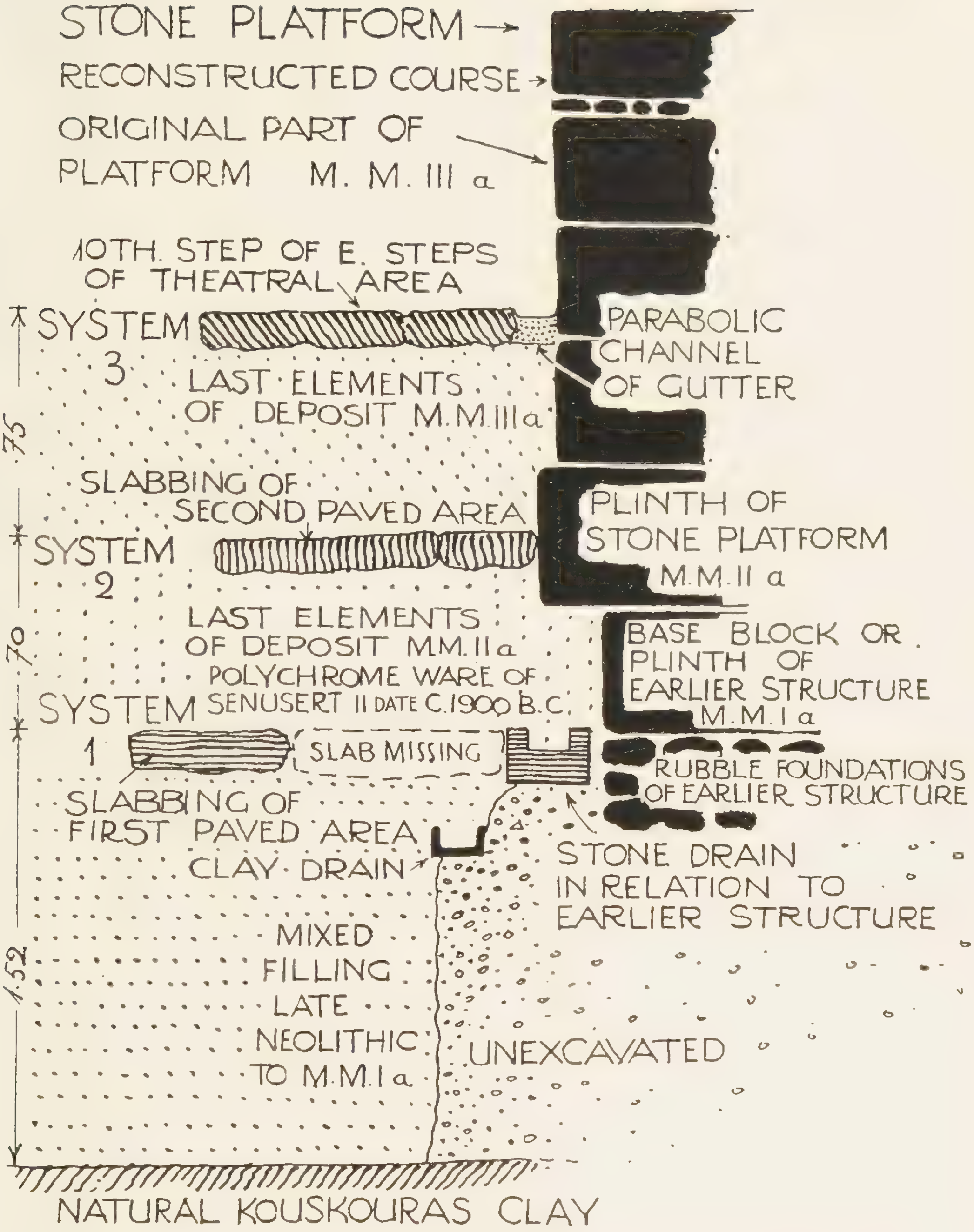
STONE PLATFORM
RECONSTRUCTED COURSE
ORIGINAL PART OF PLATFORM M. M. III a
10TH. STEP OF E. STEPS OF THEATRAL AREA
SYSTEM 3
PARABOLIC CHANNEL OF GUTTER
LAST ELEMENTS OF DEPOSIT M.M.III a
.75
SLABBING OF SECOND PAVED AREA
PLINTH OF STONE PLATFORM M.M.II a
SYSTEM 2
LAST ELEMENTS OF DEPOSIT M.M.II a
.70
POLYCHROME WARE OF SENUSERT II DATE C.1900 B.C.
BASE BLOCK OR PLINTH OF EARLIER STRUCTURE M.M.I a
SYSTEM 1
SLAB MISSING
RUBBLE FOUNDATIONS OF EARLIER STRUCTURE
SLABBING OF FIRST PAVED AREA
CLAY DRAIN
STONE DRAIN IN RELATION TO EARLIER STRUCTURE
MIXED FILLING LATE NEOLITHIC TO M.M.I a
1.52
UNEXCAVATED
NATURAL KOUSKOURAS CLAY

Fig. 172. Section under 10th Step of Eastern Flight, 'Theatral Area', showing Stratigraphic Horizon of Parabolic Channel beside Stone Platform.

Pottery with 'racquet and ball' motives: of Senusert II's time.

these were some polychrome pieces of great chronological value, since they exhibited parts of the 'racquet and ball' decoration like that already illustrated in the case of a fine jar from the South-East Palace Angle, and of an 'egg-shell' bowl from the Royal Pottery Stores,[1] and which in turn find their counterpart on the sherd from Harageh, near Kahun in Egypt, dated from the reign of Senusert II—*c.* 1906–1888 B.C.[2] It is worth noting, moreover, that, among the small fragments of painted plaster found in the associated deposit,[3] was one faced with 'kyanos' blue[4] of the bright cobalt hue conspicuous on Minoan frescoes from the middle of M. M. III onwards. In this case, however, it already evidences an earlier reaction of this Egyptian technique, due to the intensive intercourse under the Twelfth Dynasty—the counterpart of the appearance of M. M. II polychrome sherds at Kahun and Harageh.

The pavement immediately above this stratum, belonging to an epoch when the earlier phase *a* of M. M. II was thus stratified, must have been constructed not long after the above date, early, at any rate, in the nineteenth century B.C. It answers to what has been above referred to as 'System II', which corresponds with the laying out of a second North-West Court. This pavement runs up to the face of the South-East corner bastion or stone-built platform 20 centimetres from its base, and it is obvious that the two constructions stand in direct connexion with one another. This platform, therefore, in its original shape is seen to have been built beside a more or less level pavement without any runnel, and its chronological place must be about the middle of M. M. II. It was, as will be seen from the Section, Fig. 172, provided with a plinth against which the original paving slabs of System II abutted. To what epoch then must be referred the Eastern flight of steps to which the platform was eventually wedded?

Above the second pavement level was a deposit 75 centimetres thick. This, together with earlier and intermediate fragments, contained remains of several cups of the types of those with the ink-written inscriptions[5] belonging to the phase *a* of the Third Middle Minoan Period. It is to within this epoch then that we must ascribe the final arrangement of the whole 'Theatral Area' including the construction of the East flight of steps. At the same time this fixes the date of the cement runnel with parabolic curves that followed the descent of the steps and united them to the corner bastion which, as has been shown, was already in existence.

The working out of these later arrangements—which may be here described as System III—shows clearly enough that the 'Theatral Area' as it has come down to us was not an unitary composition, but an outgrowth of two systems of earlier planning. The Southern flight of steps is now proved to have been an integral part of System I, dating from the beginning

found near the gap in the lower pavement, but had clearly belonged to the stratum above it.

[1] See *P. of M.*, ii, Pt. I, p. 206 and Coloured Plate IX (opposite p. 215), *c*, *d*. The close relation to the S.E. Palace Angle group of polychrome vessels is shown by the fact that certain scrolls and part of the borders of a rosette seen on the present fragments, though not found on the tall jar with the 'racquet' motive, correspond with ornamental designs on other vessels of the S.E. pottery group (Coloured Pl. IX, *e*, *f*).

[2] *Ibid.*, pp. 211–13, and Fig. 119, *g*. Cf. R. Engelbach, *Harageh* (British School of Archaeology in Egypt, 1923), pp. 10, 11.

[3] Other fragments were found with Venetian red and dull grey facing, and in one case above the latter part of what seems to have been a spiral red decoration on a white ground.

[4] Formed of crystalline silicate of copper. (On this see *P. of M.*, i, p. 534 and note 4, and F. Fouqué and A. P. Laurie, *loc. cit.*)

[5] *P. of M.*, i, pp. 588, 589, and Figs. 431, 432.

of M. M. I, or, approximately, 2100 B. C., and afterwards cut short and partly overlaid at their Eastern extremity by the successive later systems.

Results acquired —runnel of M. M. III *a* date.

It appears then that in this case the parabolic channel belongs to the initial phase, *a*, of the Third Middle Minoan Period, going back at least to about the middle of the seventeenth century B.C. At the same time the endeavour to ascertain the exact Minoan stage to which the later flight of steps here belonged has been fertile in results that illuminate the whole history of that Palace area, and of which it has been necessary to give a *résumé* in this place. So far as the special inquiry is concerned, to which these investigations were primarily due, these results must be taken to lead to a very definite conclusion. The cement runnel of which we have here the remains, together with the steps with which it is organically connected, proves to be earlier—roughly speaking, by the greater part of the Third Middle Minoan Period—than the stone examples above described. Whether channels to which this parabolic system was applied existed at a still earlier date must remain a moot point.

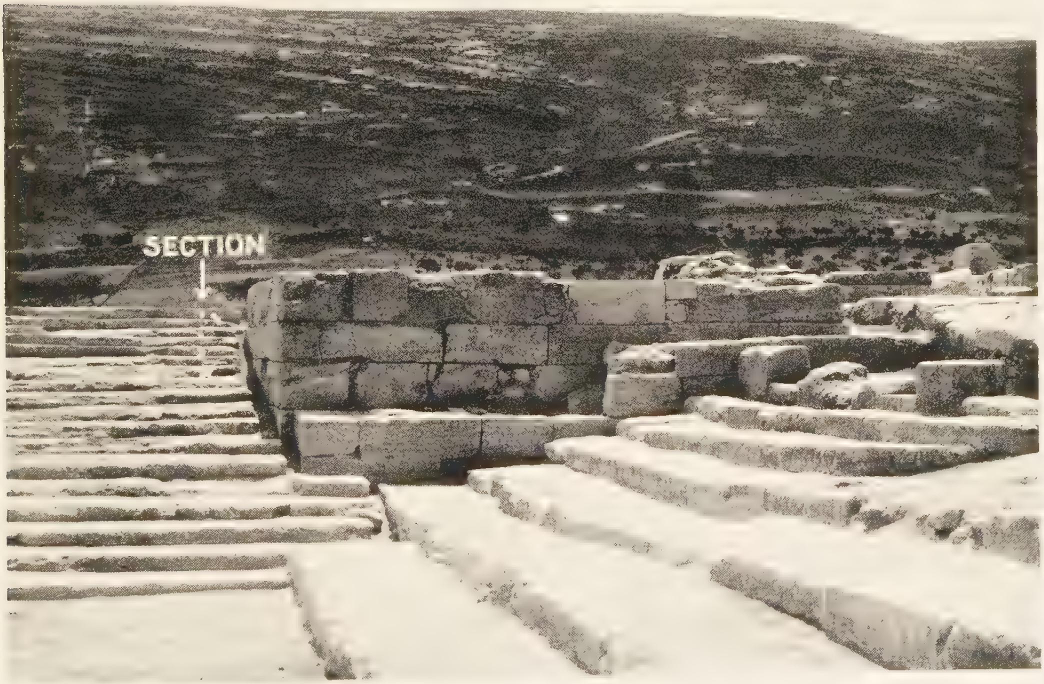

Fig. 172 a. View of N.E. Corner of 'Theatral Area', showing Bastion and Position of Runnel.

§ 79. ADVANCED MINOAN WATER-SYSTEM; PIPES AND CONDUITS; FOUNTAIN OF FRESCO; CYLINDER-BUILT WELL WITH MINOAN SIGNS AND MELIAN PARALLEL; SUMERIAN COMPARISONS.

Advanced Minoan water-system; Sections of terra-cotta water-pipes; Minoan Wells; Discovery of M. M. I a *well by Villa Ariadnê; Well composed of clay cylinders—Incised signs on rims of clay drums; Repetition of Minoan linear sign; Cylinder-built well of Late Mycenaean date, Phylakopi; Evidence for Greek or Greco-Roman origin of Knossian example—Glass fragments in exterior clay filling; Was there here a surviving tradition of Minoan craftsmen? Oriental origin of cylinder-built wells—examples at Ur in association with primitive stage of 'tholos' tomb; Fresh evidences of Minoan indebtedness to early Chaldaean civilization.*

Advanced Minoan water-system.

THESE runnels with their parabolic curves following the turns of outer stairways, the further scheming of their channels to secure the precipitation of sediment in intermediary catch-pits, the whole elaborate method of collecting the maximum amount of rain-water, freed from impurities, so as to use it for washing or other purposes in a tank below—all this is only one side of the highly skilled hydraulic knowledge to which the Minoans had attained. The elaborate drainage system of the Palace [1] and the connected sanitary arrangements [2] excite the wonder of all beholders. The terra-cotta water-pipes with their scientifically shaped sections, nicely interlocked, which date from the earliest days of the building [3] are quite up to modern standards. The practical knowledge that they imply of the law by which water finds its own level has since, indeed, been further illustrated by the discovery of the Minoan conduit heading towards the Palace from the pure limestone spring of Mavrokolybo [4] and implying a descending and subsequently ascending channel.

Sections of terra-cotta water-pipes.

The slightly tapering form of the sections of which the terra-cotta pipes were composed, illustrated by the examples from the South Porch [5] and of the Upper Eastern terrace, known as the 'Corridor of the Draughtboard' [6], here repeated in Fig. 173, were admirably designed to impart a shooting motion to the flow of the water so as to prevent the accumulation of sediment. The smaller end in each case, as is shown in Fig. 173, was provided with an expanding rim to which the wider end of the next section, also made thicker, was attached by clay and plaster cement. It appears that piping of a similar character has been lately re-invented. A smaller clay water-pipe consisting of socketed tubes was found in connexion with the oblong chamber North of the Northern Gate passage.

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[1] *P. of M.*, i, p. 225 seqq. (§ 10).

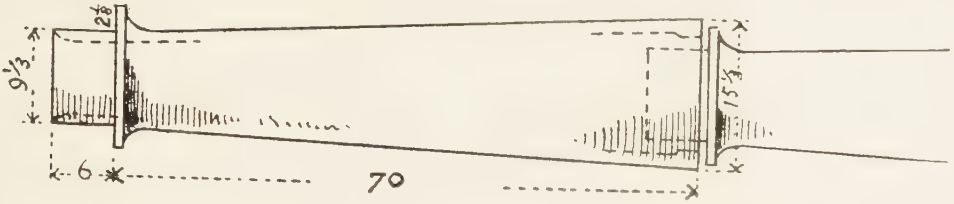
[2] *Ibid*, pp. 228–30, and Fig. 172.

[3] *Ibid.*, p. 141 seqq., and Figs. 103, 104.

[4] *Ibid.*, ii, Pt. II, pp. 462, 463, and Fig. 273.

[5] Cf. *ibid.*, i, pp. 141–3, and Figs. 103, 104, A.

[6] Cf. *ibid.*, i, p. 143, Fig. 104, B.



Elevation of Drain Pipes below Floor in 'Corridor of Draught-board'.

[*Measurements in Centimetres.*]

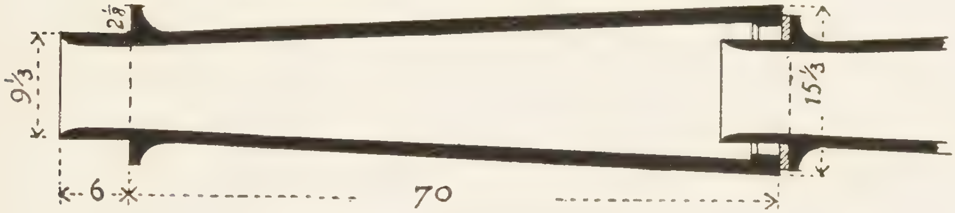


FIG. 173. SECTIONS OF TERRA-COTTA WATER-PIPES, BELOW 'CORRIDOR OF DRAUGHT-BOARD': BY THEODORE FYFE.

We have seen that in the case of the foot-washing basin of the 'Caravanserai' the constructor positively revelled in the use of pipes and ducts.[1] Here, in the curving channel of the conduit above—bringing the water from the spring—we find another example of the system described above, and once more taking us to the epoch of the Great Restoration.[2] The basin itself, besides its inlet duct, has an overflow channel, a supply pipe, carefully set immediately beneath it to feed a stone trough, and a vent-pipe in one of its bottom slabs with a stone stopper.

Jets d'eau.

But perhaps the most illuminating record of the modern level attained by the Minoans at this epoch in their hydrostatic arrangements is to be seen in the actual representation of a *jet d'eau* and part of another brought to light in the 'House of the Frescoes'.[1] These painted designs, showing the central column of water and falling drops, are of such interest that it has been thought well to reproduce them here with their original hues in the Coloured Plate XXII. The boulder, apparently, sketched to the right above suggests an artificial fountain of an English rock garden. It is hard, however, to explain the forked or curved outline of the foot of the column of water, unless it be intended to represent its upward spring.

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[1] *Ibid.*, ii, Pt. I, pp. 116–21, and Fig. 57.

[2] See *loc. cit.*, p. 116. On p. 119 the parallel examples of channels with parabolic curves are referred to 'the early part of the Late Minoan Age'. It is now certain that they belong to the 'post-seismic' phase of M. M. III *b*.

Minoan wells.

In the proto-palatial stage wells were largely in use for securing a supply of drinking water. On the terrace above the wall with the stone spout one of these was excavated to the depth of twenty-two and a half metres, at which it became too dangerous from the falling in of the sides for further excavation. A great amount of M. M. I *a* pottery was brought out from its lower level. Another well with a similar ceramic association was found beneath the lower section of the Stepped Portico to the South-West; this, however, was never completed owing to its excavators striking hard rock. A third, of the same epoch, was hit on in a curious way in the Vineyard by our head-quarters house, the Villa Ariadnê, above the 'Little Palace' somewhat to the North-West. Owing to shortness of water it was thought desirable to open out a new source. The native workmen wanted to sink a well at a somewhat more remote spot in the vineyard, but, acting on some vague inference from the contour of the hill-side above, I drew a cross in the earth surface beside a large block that happened to be standing at that spot and bade them dig there. Returning a few days later from an exploration up country I found all the world agog. On removing about a foot of superficial soil the men had exposed the choked opening of a Minoan well as nearly as possible a metre in diameter, at the bottom of which 12½ metres down—about 42 feet—in the 'kouskouras' formation, was an abundant spring of water which proved to be of better quality than any for miles round, and still supplies the house. In it there still stood a pair of two-handled pitchers of a characteristic M. M. I *a* class—*c.* 2100 B.C. (Fig. 174). To the workmen the + mark (σταύρος) was a sign of supernatural guidance, and I found myself suddenly hailed as a miracle-worker!

Discovery of M. M. I *a* well by Villa Ariadnê.

The practical knowledge of the fact that water finds its own level—evidenced by the water supply of the Palace by means of pipes and conduits fed by sources in the neighbouring hills—made the construction of wells for drinking water less necessary. At the same time the ready access to spring water, cool and fresh, such as a well alone could supply, made the construc-

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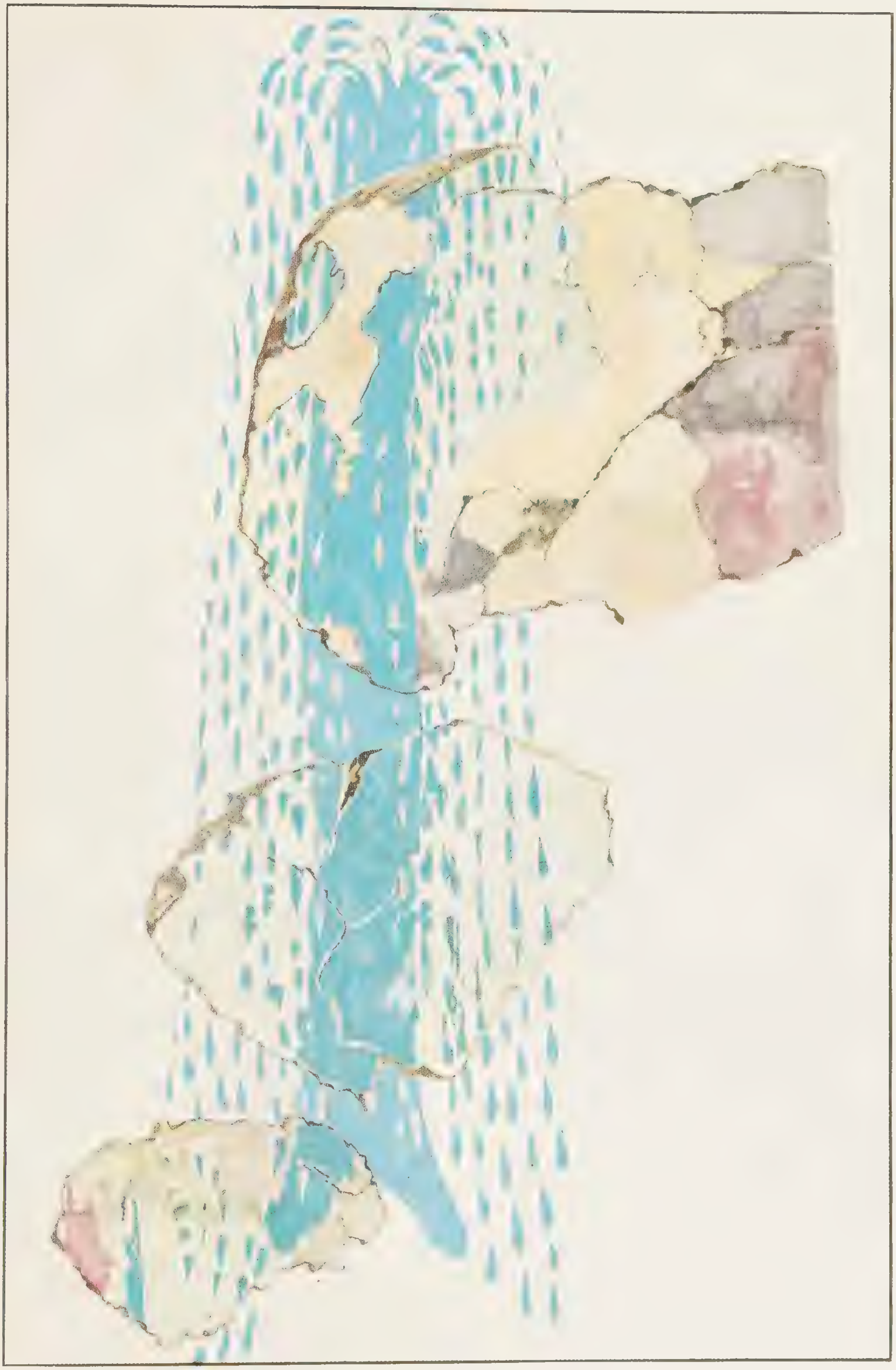
[1] *P. of M.*, ii, Pt. II, pp. 460, 461, and Fig. 272.

PLATE XXII



FOUNTAIN (*JET D'EAU*) FROM PAINTED STUCCO PANEL,
HOUSE OF THE FRESCOES
(HEIGHT *c.* 60 *cm.*)

tion of such desirable in addition to other sources of supply. A comparatively late example was in fact discovered opening in the pavement of the Eastern Portico of the Hall of the Double Axes.[1] This well, described below in relation to the Hall, seems to have been a work of the Great Restoration towards the close of M. M. III.[2]

In this connexion, moreover, it is impossible to pass over an example which, though apparently of later date, shows remarkable evidences of Minoan tradition.

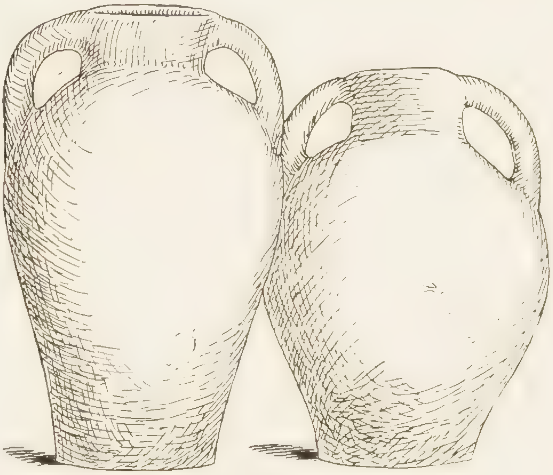


Fig. 174. Water Pitchers, M. M. I *a*. (*c*. $\frac{1}{7}$)

Cylinder-built Well with Minoan Signs.

In the course of the excavations of 1926 in an early Town area to the North-West of the Palace, the basements of two houses belonging to the earliest M. M. III phase (*a*) were brought to light.[3] But it was only due to the falling in of part of the floor of House A, two years later, that the existence here of an early well revealed itself. Its upper circuit was mostly a patchwork of rubble masonry, recalling the construction of the numerous Roman wells of this site. Below this ill-built upper 'collar', however, the well was found to be cased in a series of terra-cotta cylinders, of fine fabric and of material so hard that it was at first mistaken for some kind of close-grained stone.

Well composed of clay cylinders.

These successive 'drums', representing in principle an advanced system for resisting the pressure of the surrounding soil, had been sunk into the natural 'kouskouras' clay below the Minoan level to a depth of about 10·40 metres, there having been originally at least 17 cylinders, each 60 centimetres high (see Figs. 175, 178).[4] Every cylinder was composed of three nicely compacted sections, and in each of these was cut a triangular hole for the hands to clutch or the feet to rest on of those, who for cleaning out or other purposes, had to descend the well. The position of these sections alternated in the successive courses like the blocks of isodomic masonry (see Fig. 176).

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[1] See below, p. 326.

[2] In Plan B at the end of Vol. II this well was wrongly placed outside instead of under the Portico. The error is corrected in the revised Plan, Fig. 218, below. A well with a considerable store of pottery M. M. III *a* to L. M. I *a* was also found on the slope of the Hill of Gypsádes. (See *P. of M.*, i, pp. 595, 596, and ii, Pt. II, p. 549.)

[3] *P. of M.*, ii, I, pp. 366–8, and Fig. 203.

[4] The expanding upper rim of each 'drum' was about 5·75 cm. wide. The lower borders of the cylinder were *c*. 5 cm. wide.

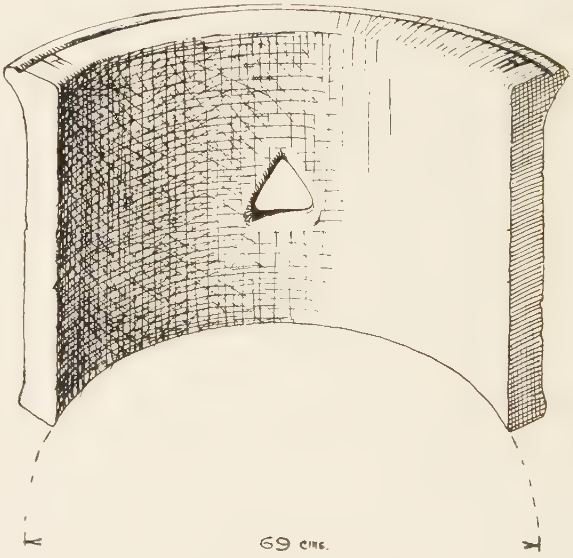
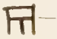


Fig. 175. Section of Terra-cotta Drum of Well.

Incised signs on rims of clay 'drums'.

A remarkable feature in the arrangement was the incision on the expanding upper rims of each 'drum' at the points of junction of their three sections of incised linear signs, apparently designed to show to which cylinder they were to be fitted. Of those that it was possible to examine, two, a sloping form of N and a kind of W—and a double X were simple linear forms of no individual significance. Another was of more complex form .[1] The , however, repeated in Fig. 175 represents one of the most characteristic signs of both the advanced Cretan Linear Scripts.[2] The fashion of engraving marks on objects with reference to their place in a series was itself deeply rooted among the Minoan craftsmen from the earliest to the latest days of the Middle Period. The marks used on the blocks of buildings represent, in fact, only one out of a series of parallel signaries such as we find on inlays of various materials.

Repetition of Minoan linear sign.

The fuller form of the sign was —perhaps representing the front of a building, with a single column—and the present version must be regarded rather as a secondary type, often found in the Linear Script B.

Cylinder-built well of Late Mycenaean date: Phylakopi.

Nor was this the only feature that seemed to point to a Minoan source. The method of encasing wells in baked clay cylinders provided with clutch holes had been already illustrated by a 'Mycenaean' example brought to light by the excavators of the British School at Athens in a courtyard of

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[1] This has a Minoan character, bearing some resemblance to No. 60 in my Table of Signs of the Linear Class A (*P. of M.*, i, p. 642, Fig. 476).

[2] No. 30 of the Table (*loc. cit.*) shows this sign in its most complete form. In its origin it is possibly a simpler variant of (No. 31 of Table), and in both forms we may perhaps recognize fronts of buildings with one or two columns respectively.

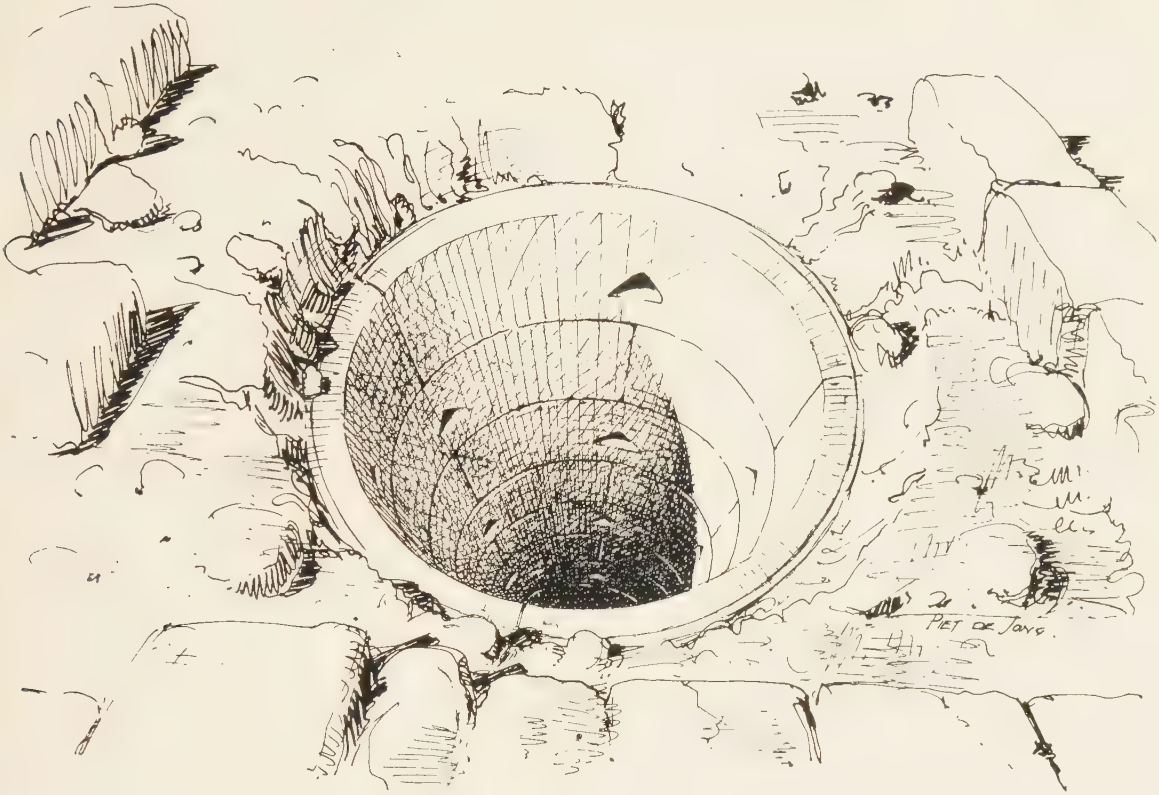
PIET DE JONG.

FIG. 176. PERSPECTIVE VIEW OF WELL BELOW HOUSE A, N.W. OF PALACE.

the prehistoric Settlement at Phylakopi in Melos.[1] In that case the wall had been lined with cylinders of more ordinary earthenware, 75 centimetres in diameter and a metre high (Fig. 177), one rim of each being roughly shaped into a socket so that the next would fit on to it. Clutch holes, here round, were also made in these. The bottom of the well, which was sunk to a depth of over 9 metres, contained abundant sherds belonging to the latest period of the 'Mycenaean' occupation, but the presence of a small number of earlier sherds is recorded.[2]

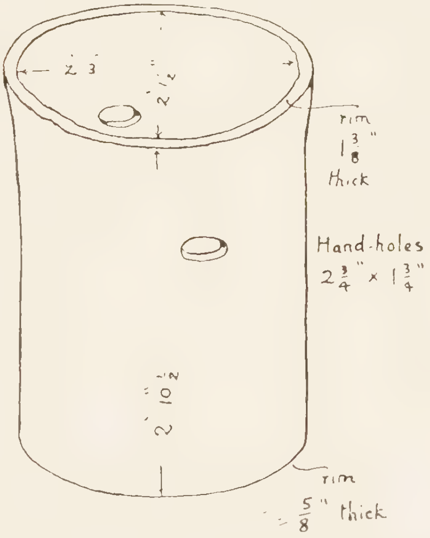

FIG. 177. TERRA-COTTA CYLINDER OF 'MYCENAEAN' WELL, PHYLAKOPI, MELOS, SHOWING CIRCULAR FOOT-HOLES.

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[1] *Excavations at Phylakopi in Melos*, p. 20, and Fig. 10, p. 58 and Fig. 51, reproduced from Mr. T. D. Atkinson's drawing.

[2] C. C. Edgar, *op. cit.*, p. 160.

Evidence for Greek or Greco-Roman origin of Knossian example.

It was not unnatural to see in the Melian analogy and the character of some of the incised signs a strong presumption in favour of the Minoan origin of the cylinder-built well at Knossos. But the evidence of the objects found in the interior of the well itself imposed great caution in accepting such a conclusion. These proved to be exclusively of a Classical character. One Late Geometrical sherd occurred of the eighth century B. C., but most of the fragments were clearly of Roman date, and they included remains of a good bronze *situla*. The base of what seems to have been a *kylix* with a black glaze in the interior may be taken to carry back the use of the well to Late Greek times, probably at least to the third century B. C. But no single relic of Minoan date was brought out either from within the cylinders or from the mud below. It is true that the Roman patchwork above pointed to a period of re-use. It is also true that the facilities afforded by the ledges made it specially easy to clear out and the smooth surface would have enabled such a clearance to be effected in a very thorough manner. The Roman wells cut through the Minoan houses immediately East of this were themselves of rubble construction.

Glass fragments in exterior clay of filling.

Nevertheless, considering the actual contents of the well, there seemed to be still grave room for doubt. As a means of ascertaining the date of the structure an examination of the filling material between the exterior of the cylinders and the natural face of the cutting around them appeared to be a likely expedient. The sherds in this filling as excavated for about a metre down proved, however, to correspond with those of the circumjacent stratum and were all Early Minoan. As the date of the well was on any showing later than that Age, this was evidently unsatisfactory. One result of this excavation, however, was to show that, apart from this rubble filling, the cylinders had been surrounded with rings of stones compacted by heavy lumps of clay set between them. This clay had been undoubtedly brought specially from outside—might it not contain some extraneous elements of chronological value? I had therefore several lumps picked out and brought up for examination, and the waning hope of a definite result was realized in an unexpected manner, dramatic in its decisiveness. One of them contained some small fragments of glass—recalling the remains of small glass unguent bottles found in the well itself, and certainly not later than Roman or Hellenistic times. Unless, therefore, we are to suppose that the clay drums were re-set, this result must be regarded as a strong argument in favour of the late date of this remarkable piece of construction. There is left indeed, however, the off chance that extraneous elements had worked into the clay packing through fractures in the clay drums.

Was there here a tradition of Minoan craftsmen?

At the same time the parallels evoked both by the casing of the well and the engraved signs of characteristic Minoan forms become all the more remarkable.[1] The discrepancy of date, indeed, is so great that to trace any direct relation to Minoan usage would seem to be unwarranted. It may yet be recalled, however, that, as the Greek-written inscriptions of Praesos show, the Eteocretan element still maintained its indigenous speech in the East of the Island and the Knossian folk-lore preserved by Diodoros itself points to a great survival of tradition in this old Minoan centre. It is not altogether therefore outside the bounds of possibility that the Helot caste of which we have evidence, under the name of *Μνωΐα* from an inscription found at Eleutherna,[2] West of Knossos, included an artisan class of Minoan descent that drew some traditions of their crafts from much earlier days.

Oriental origin of cylinder-built wells: examples of Ur.

Whatever the actual date of the interior construction of clay drums as seen in this well it must at any rate be admitted that it was of very ancient tradition. The Melian example is itself sufficient to show that this method of well making was known to the Mycenaeans. But the most recent discoveries of Ur have brought to light a form of well-like pit, lined with superposed clay cylinders, already known to Sumerian civilization in the Fifth Millennium before our era. The drums were provided with rims like those of Knossos and resembled them even in their proportions.

Thanks to the kindness of the explorer, Mr. C. Leonard Woolley, it has been possible to illustrate this Sumerian type of well construction as seen beside the burial vault of a Sumerian Queen in Fig. 178.[3] In this case the terra-cotta drums served as a vertical drain between the outer wall of the burial vault and the side of the vast sepulchral pit at the base of which it lay. It was down this shaft that libations were poured to the Underworld. On the other hand, beneath the floor of the burial vault itself, a single clay drum of the same type had been set, packed inside and out with broken potsherds which had probably served 'for the draining away of fluids from the decomposing bodies'.

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[1] Certain forms in the early Greek inscriptions of Crete are non-Hellenic. At Lyttos ◎ (for ○) approaches a Minoan form.

A sign noted by Professor Halbherr on the great inscription of Gortyna o˥ is un-Greek, but has no Minoan parallel. On the other hand, ˥ for B, and K for ᴋ find Minoan parallel.

[2] On a fragmentary stone with early boustrophêdon writing copied by Dr. F. Halbherr at Eleutherna. He notes that scholion of the Cretan lyric poet Hybrias refers to this caste. Similar Helots also existed at Gortyna.

[3] Here enlarged from the illustration in his Report, now published, on *Excavations at Ur, 1928–9*, in the *Antiquaries Journal*, 1929, pp. 312–15. The Tomb is PG/1054.

The burial vault in its turn affords by far the earliest dated example of the 'tholos' type of sepulchral chamber domed above by overlapping courses. What is specially interesting, moreover, from the typological point of view is the fact that it shows this 'Cyclopean' method of vaulting still in its experimental stage, the top of the vault having been originally partly supported by a wooden framework, the holes for the beams of which were carried through the cupola.[1] Doubtless, as in the case of the proto-

In association with primitive stage of 'tholos' tomb.

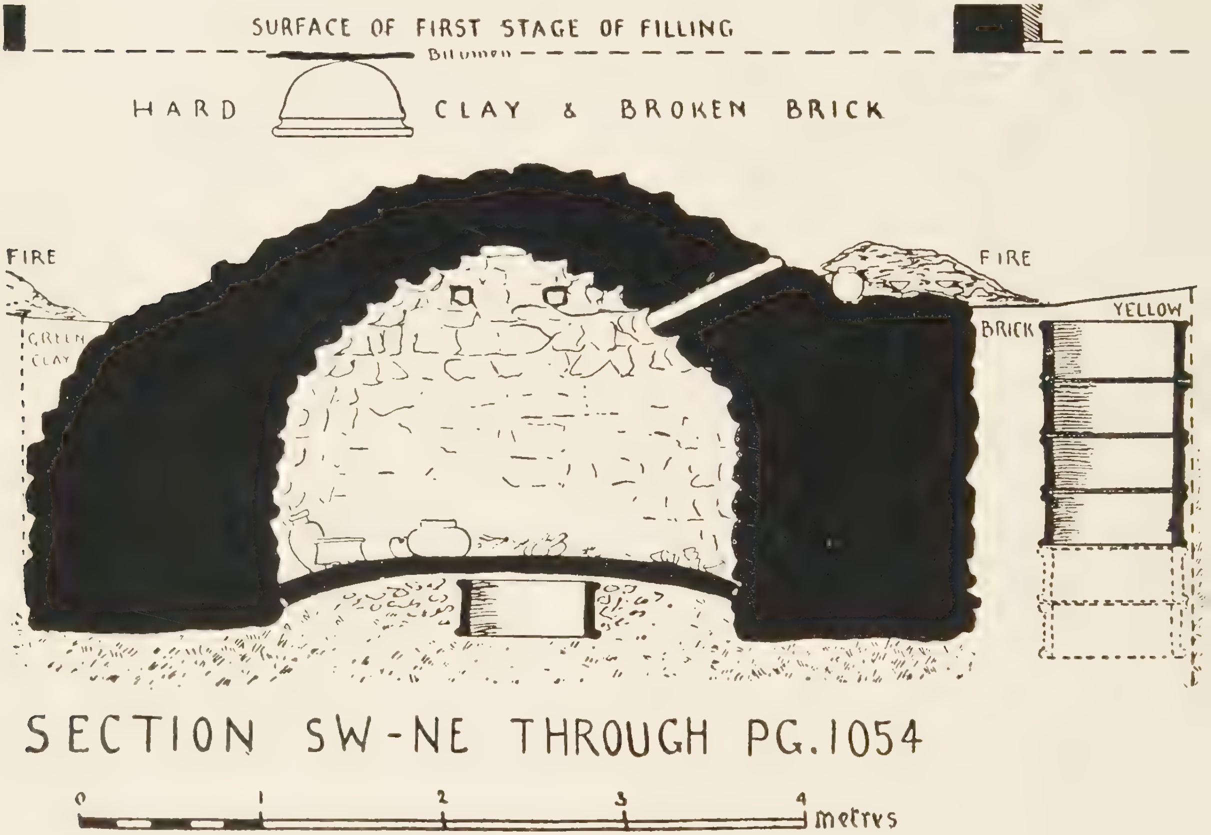

FIG. 178. SECTION OF 'THOLOS' TOMB OF SUMERIAN QUEEN AND WELL-LIKE SHAFT, CONSISTING OF TERRA-COTTA DRUMS TO RECEIVE LIBATIONS. (FROM C. L. WOOLLEY, *Excavations at Ur, 1928–9*, in *Antiquaries Journal*.)

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[1] Mr. Woolley writes (*op. cit.*, p. 312): 'Half-way up the dome there were square holes running right through the masonry left by the decay of the beams employed as a centering in the course of construction. By inserting stones across the angles of the chamber walls in the form of rough pendentives the builders had converted the square to a circle; when the full height was attained they started to construct a ring dome. But as the stones drew together, they appear to have mistrusted their skill and therefore laid stout

Libyan 'beehive' tombs cited for comparison in this work, the sepulchral vault itself represented a primitive type of dwelling, maintained in use for the dead by religious conservatism.

It is to be observed that this earlier type of vault coexisted with another in which a certain advance had been made, the stone curves projecting with a slight tilt and being completed with a key-stone rather than a cap-stone. Again, in another case, there was 'a true dome built in stone'.[1]

We have here, in fact, a perfect analogy for what is found at Mycenae. There, too, vaulted tombs representing different typological stages coexisted,[2] and there is no warrant for drawing chronological conclusions from the structual variation.

At the same time, the existence of these very early examples of the 'tholos' type of tomb on Chaldaean soil enhances the possibility that it made its way to the Aegean lands from the Asiatic side.

Fresh evidence of Minoan indebtedness to early Chaldaean civilization.

It was already pointed out in the second volume of this work, and before these epoch-making discoveries, that the Minoan form of lyre, as first seen on seals of the hieroglyphic class, was essentially a derivation from the old Chaldaean, as found at Tello.[3] The gazelles' heads with which—through Egypt in that case—the later Minoan lyres were decorated, are now seen to find still more remote predecessors in the horned heads of bulls and stags such as adorned the harps of the royal musicians, whose sacrificed remains were found with them in this and other royal tombs of Ur. Nor can we omit to notice that the golden sprays of leaves and flowers that bedecked the head-dresses, alike of departed queens and of the Court ladies sent to accompany them to the World below, curiously recall the similar adornments found in Early Minoan graves at Mochlos and elsewhere.[4]

The same remote indebtedness has been traced above in the case of the Early Cretan bull 'rhytons'. Directly and indirectly, often indeed through circuitous Nilotic channels, the debt of Minoan Crete to the still older civilization of Sumeria becomes more and more apparent.

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timbers across the opening and put over these planks on which straw and light earth were piled to support the upper part of the domed roof. This centering was left in position and made a false ceiling.'

[1] *Ibid.*, 312.

[2] See my remarks in *Shaft Graves and Beehive Tombs of Mycenae*, pp. 67, 68, and compare *P. of M.*, ii, Pt. I, p. 41 seqq.

[3] *Ibid.*, ii, Pt. II, p. 834 seqq., and cf. Figs. 552-4.

[4] *Ibid.*, ii, Pt. I, p. 260 seqq., and cf. Figs. 156, 157.

§ 80. 'East Corridor', linking East Bastion and Stepway with 'Domestic Quarter': newly discovered 'East Portico' and Later 'East Stairs'.

Fortificatory aspect of East Bastion and wall-lines—special preservation owing to recess in East slope; 'South-East stairs' from Domestic Quarter to 'Corridor of Labyrinth'; 'North-East stairs' from same and side access to 'Laundry' steps; 'East Corridor' Main line from 'Domestic Quarter' to stepway leading to 'East Postern'; Earlier Magazines of 'Corded pithoi' underlying its entrance system; Blocking of 'East Corridor'—its date at first mistakenly referred to M. M. III; Proves to be work of later squatters, with L. M. III pottery beneath it; Division of Entrance Hall of 'East Corridor' in M. M. III b*; Doorway opening on 'Court of Stone Spout' with massive threshold slab; East boundary of 'Court of Stone Spout'; Discovery of Verandah on its North side; 'Room of Stone Pier'; Lapidary's store of worked blocks of Spartan basalt; Workshop above with unfinished Amphoras; Bowl of Spartan basalt from 'Royal Tomb'; Presumed wooden steps from lower Store-room to upper Workshop; 'Lobby of the Wooden Posts'—block above Balustrade pier raised to original position; Characteristic M. M. III timbering; Symmetrical reversing of W. and E. balustrades; Discovery of 'East Portico'—massive foundation blocks of four columns; Agreeable open-air retreat from closed areas; Later 'East Stairs'—constructed after a seismic collapse; Great Deposit of L. M. I* a *pottery beneath steps—vessels of ordinary use; Numerous Artisans within Palace; Minoan flower-pots; Comparison with similar contemporary deposits—signs of severe dislocation c.* 1520 B.C.*; Evidence for dating spiral decoration in neighbouring halls.*

Fortificatory aspect of E. Bastion and wall-lines.

The East Bastion, with its postern gate above its winding staircase and elaborate water system, formed far and away the most important feature of the Palace border along the foot of the slope on this side. In its repaired and partially reconstituted form, as will be seen from Fig. 170, it still forms a magnificent monument. Although, as shown above, a work of the Great Restoration after the Earthquake that took place during the later phase of M. M. III, it is the only part of the enceinte that—together with a section of the Northern wall-lines—has preserved to our day a fortificatory aspect [1]

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[1] See above, p. 6.

This is enhanced by the remains, immediately backing it, of two massive earlier lines of walling together with somewhat more irregular remains of another on the steep immediately behind it. (See Fig. 165 and Suppl. Pl. XXXIV.) Of these the third wall, reckoning from the outer line, squares best with the original exterior planning of the Palace on this side and forms, in fact, the Eastern outer boundary of the 'North-East Insula'.

Special preservation, owing to recess in East slope.

That the outer wall-lines along the lower part of the steep were thus renewed at different epochs during the course of the Palace history is naturally explained by their special liability to damage by seismic agencies. The East Bastion seems to have owed its special preservation from its position in the inner curve of what was a kind of recess in the slope of the hill-side. This was marked, at any rate at the epoch to which the Bastion belonged, by walls running East beyond the normal boundary line in that direction, and enclosing structures the remains of which seem to have been almost entirely grubbed up by the owners of the adjoining Turkish *Chiflik* and the inhabitants of the neighbouring hamlet.

Immediately South of this blank the remains of the lines of outer walling already described are seen to continue a little more widely espaced and giving room, indeed, between the Third and Fourth wall for a corridor, in the Southern section of which the 'Labyrinth Fresco' came to light.[1]

S.E. and N.E. stairs from Domestic Quarter to 'Corridor of Labyrinth'. Side access from N.E. stairs to 'Laundry' steps.

We now know that this part of the passage-way that here runs along the lowest terrace of the Palace on that side was brought into direct communication with the Southern borders of the 'Domestic Quarter' by a staircase descending past the S.E. door of the 'Hall of the Double Axes'.[2] On the other hand, the opposite door of that Hall stands in relation with another staircase that would have reached the Corridor of the 'Labyrinth Fresco' somewhat farther North. It seems probable that in that direction a line of access existed, through some opening in the enceinte wall immediately South of the East Bastion, to the secondary staircase on its flank leading down to the presumed laundry basin.

Main line from Domestic Quarter to E. Postern by 'East Corridor'.

But the main line of communication between the principal halls of the 'Domestic Quarter' and the egress system represented by the postern above the East Bastion and the stepway descending it was undoubtedly along the terrace level on which they themselves lay. The 'Lower East-West Corridor', into which these halls opened and which flanks them on the North, itself takes a turn due North and finds its continuation along the same level in a passage-way that may be conveniently called the 'East Corridor' (see Plan, Fig. 183). This, after passing through a fine terminal hall, leads into the little 'Court of the Stone Spout' on the North side of which an opening visible in the fine gypsum façade gave access to an upper landing of the staircase that descends to the East Postern and Bastion.

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[1] *P. of M.*, i, p. 355 seqq., and Fig. 256.

[2] See below, p. 328.

This route of egress from the residential part of the building must itself have served the convenience of the Palace lords in a very special manner, if, as has been suggested, the 'Dancing Ground' and the arena of the bull-grappling sports lay on the river flat below, with its ancient groves and varied amenities. The 'Royal Villa', too, would have been naturally reached from the central halls on this side by the same route.

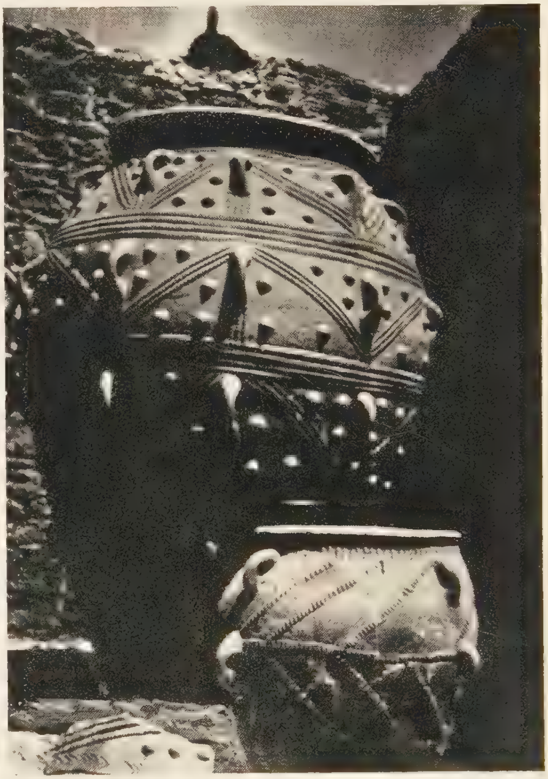

FIG. 179. VIEW OF 'CORDED PITHOI'.

Earlier Magazines of 'corded pithoi' beneath entrance system of E. Corridor.

The whole area occupied by the entrance chamber of the 'East Corridor' and the adjoining Court had been originally occupied by a series of early Magazines containing great 'corded pithoi', two of which have been partially restored and roofed over beyond the staircase-landing referred to above. On a plaster floor, about 90 centimetres below the level of the 'Court of the Stone Spout', were remains of others. The truncated base of one was found in position under the façade wall of the adjoining 'North-East Chamber', and a smaller one, practically complete, at the same depth beneath its floor. This has now been placed in one of the Magazines beside a larger pithos, and is shown for the first time in Fig. 179. Together with the remains of these 'corded pithoi', on the same level, there occurred fragments of polychrome vases of M. M. II *b* types. It was evident therefore that the revolutionary change of plan, of which we have here evidences, took place after a great destruction that marks the closing phase of that Period, and may itself be ascribed to M. M. III *a*.

The 'East Corridor' and its Entrance System from 'Court of the Stone Spout'.

Blocking of East Corridor: its date at first mistaken.

It is necessary in this place to rectify an erroneous view, previously adopted, as to the date of the later arrangements in that part of this area which lies on the South side of the 'Court of the Stone Spout', and which concerns the entrance system beyond.

At the time of the original excavation of this part of the building in 1901 [1] certain 'rustic' vessels found on the floors here, presenting a purplish brown surface accompanied in some cases with horizontal white bands, were —not unnaturally perhaps—attributed to the same M. M. III date, then called 'late Kamares', as other vases with a similar *facies*. Unfortunately this mistaken classification was perpetuated by me in the First Volume of this work,[2] although among the group of vessels there illustrated were some clay ladles of advanced L. M. III fabric,[3] pointing, indeed, to a reaction from the Mainland side.

Blocking work of later squatters.

It resulted from this misconception that, though the lay-out of the new system in this area was rightly recognized as having taken place about the beginning of M. M. III, the blocking of the North Section of the 'East Corridor' and its conversion into a Magazine, together with the benched arrangement of the room into which it opened—compared at the time of the Excavation with that of a 'School-Room'—was still brought within the Palace period. It was suggested, indeed, that these spaces had been devoted to workmen's uses towards the end of M. M. III, at a transitional time when it was decided to fill in the rooms and passage-way as a platform for new upper structures.[4]

But the certainty, since acquired, that this arrangement was entirely the work of the 'Reoccupation Period'—carried out, indeed, not earlier than its later phase, L. M. III *b*—has made it clear that both the passage-way and its ante-chamber opening on the little Court had continued to function to the last Age of the Palace. To a considerably later date they had in fact still stood as empty tenements,—doubtless still supporting the remains of the chambers built above them,—to tempt habitation by the later squatters.

A dramatic touch, supplied by the unfinished stone vases in the latest

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[1] A. E., *Knossos, Report*, 1901 (*B.S.A.*, vii), p. 96 seqq.

[2] See *P. of M.*, i, p. 365, and cf. p. 384, Fig. 279.

[3] *Ibid.*, p. 384, Fig. 279, F–F.

[4] *Ibid.*, i, p. 366. A plan showing the arrangement of this area in the Reoccupation period is given in Fig. 266, p. 367. In the description of the figure 'L. M. III *b* partitioning' should be read instead of M. M. III.

Palace style found on the floor of a little room above, in the bordering area, proves that it had remained in use to the last,[1] and this was also true of the adjoining upper chamber, overlooking the little Court, from which the 'Taureador Frescoes' were derived.

L. M. III pottery beneath it.

The blocking wall in the Corridor, removed in 1928 owing to the recognition of these facts, was found to cover fragments of the same date as the other late pottery. Carrying out still further the removal of these intrusive elements, I decided in 1929 to demolish the rudely constructed parting wall that divided the entrance room from another on its East flank, and the sherds that occurred here among the rubble material belonged mostly to the latter half of L. M. III.

Division of Entrance Hall of 'E. Corridor' in M. M. III *b*.

This wall, however, proved to have been built on an earlier line, and there came to light beneath it the gypsum jambs of two door openings of the more ancient construction giving access to the room on its East side.[1] (See Plan, Fig. 183.) On raising the gypsum door-block to the right of the more Northerly of these openings a series of sherds was obtained by me from the untouched clay-mortar bed on which it had rested, all, as far as could be judged, of M. M. III fabric. This change then may date from the great Restoration towards the close of M. M. III and runs parallel with that traceable in the adjoining room South, in which, however, a later compartment was also constructed at that time. It seems clear that, as first designed, the inner and outer sections of this area had formed one single entrance chamber. The doorway of its inner compartment, which contained a massive threshold block of 'almond stone' (ἀμυγδαλόλιθος), weighing well over a ton, had undergone more than one alteration, but was, doubtless, originally planned to occupy the centre of the North wall of a stately oblong hall. Dowel-holes on the surface of the limestone blocks West of the door-opening marked the place of a horizontal beam, partly, no doubt, supplying the lower frame of a window looking on the 'Court of the Stone Spout'.[2]

Doorway on 'Court of Stone Spout' with massive threshold slab.

The massive threshold slab of the entrance had been broken on the right side—a casualty which, considering the strength and thickness of the stone, could hardly have been caused by any lesser force than an earthquake. The later squatters had slightly raised and re-used the remaining portion of it,[3] two gypsum blocks had been set beside it, which, as their shape and dimensions showed, had been taken from a neighbouring wall on the East side of the little Court.[1] Thanks to the indications of a door-jamb and pivot-hole on the threshold slab itself and the evidence supplied by the wall blocks on either side, it was possible to restore the original arrangement as shown in Fig. 180.

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[1] See Vol. IV, and cf. A. E., *Knossos, Report*, 1901 (*B.S.A.*, vii), pp. 90–2, and Fig. 30.

[2] The block to the South was not in its original condition and had served a doorway made by the Reoccupation people on that side at a slightly higher level.

[3] On raising the block, in the course of the re-examination of the doorway in 1929, a

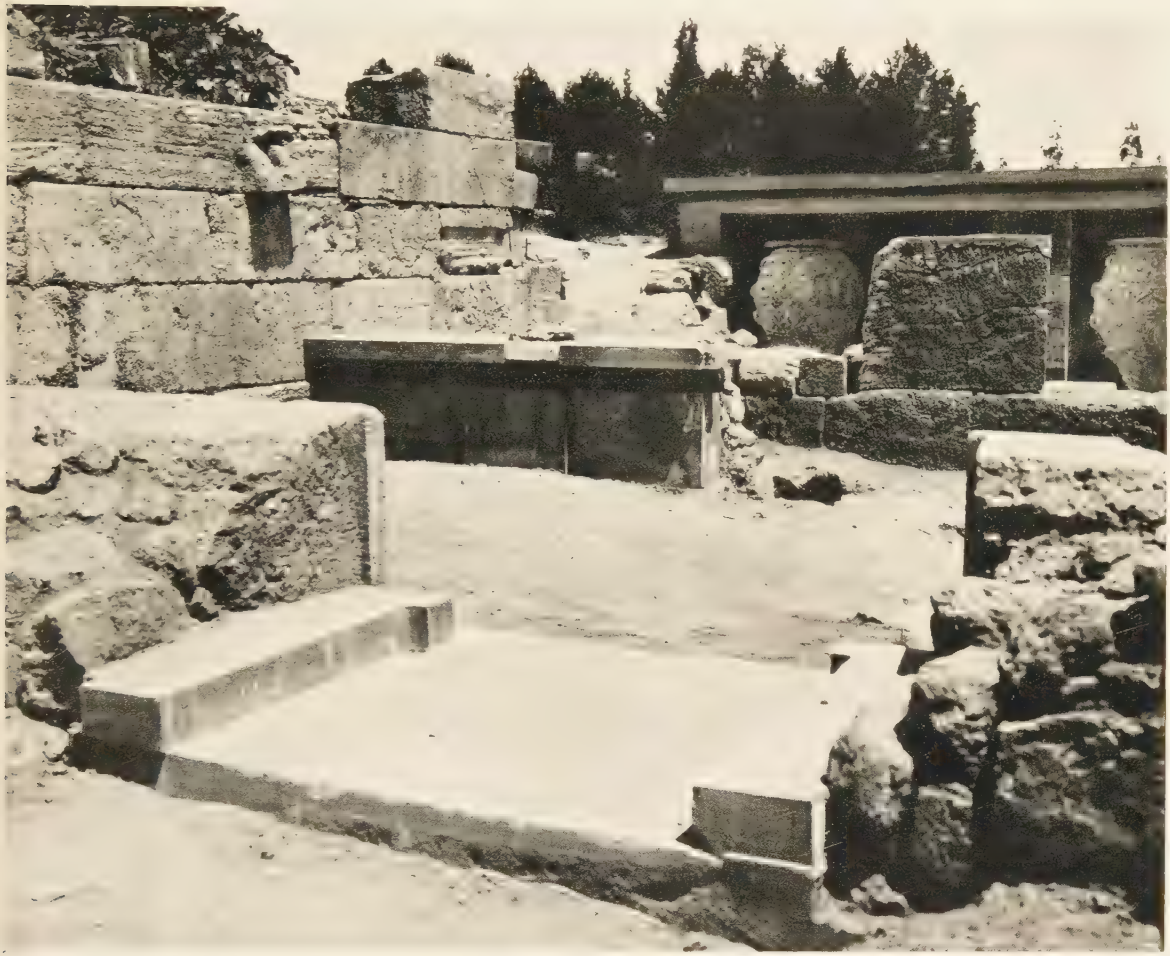

FIG. 180. VIEW THROUGH DOORWAY OF ENTRANCE HALL SHOWING 'COURT OF STONE SPOUT' WITH BALUSTRADE AND GYPSUM ORTHOSTAT OF WALL BEYOND.

series of L. M. III *b* sherds were found beneath it, including two or three bases of the latest class of pedestalled cup.

This patching up in its original shape may date from an intermediate epoch—probably the M. M. III *b* Restoration—since nothing but M. M. III sherds was found under them. The broken part of the old threshold on the other hand, as noted above, covered a good many L. M. III *b* fragments.

E. boundary of 'Court of Stone Spout'.

The old East boundary of the 'Court of the Stone Spout' on to which this entrance opened was marked by a massive line of wall, the base of which answered to the level of the surrounding M. M. II system. Its foundations could be traced to the point where they met the North Wall of the Entrance hall above described, some 3·50 metres East of the doorway.

Discovery of Verandah on North side.

On the North side of the little Court were remains of a gypsum wall composed of two courses of gypsum blocks above the limestone plinth. Such fine work in gypsum itself suggested an interior structure, and it was no cause for surprise to me that supplementary researches, carried out in 1929, revealed the existence of a line of wall running parallel to it on its Southern side for a distance of nearly 8 metres. This walling, from the associated discovery of a column-base,[1] 50 centimetres in diameter, and a section of gypsum coping, had clearly formed the substructure of a columnar balustrade running along the North border of the Court. The little Verandah thus indicated was entered by an opening in the balustrade nearly opposite the doorway above described, on the other side of the Court. This covered area in turn gave access to the staircase leading down to the East Postern. A view of a restored section of the Verandah is seen in Fig. 180 above. It must have added greatly to the amenities of the Court.[2]

Lapidary's Store of partly worked Blocks of Spartan Basalt.

Room of Stone Pier.

It has been already shown that the whole complex of structures backed by the 'East Corridor' had originally formed a very symmetrical unit. This was of oblong shape and consisted of two rectangular spaces divided by a central square. In this central chamber a solid stone pier had been inserted,[3] apparently after the great Earthquake towards the close of M. M. III, for the better security of the restored upper story and, perhaps with this object in view, the Western section of the room was partitioned off into two small magazines, the more Westerly of the original two doorways in its North wall being at the same time blocked.[4]

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[1] This was already brought to light in the earlier excavation and is seen in profile, leaning against the gypsum wall-block, in *P. of M.*, i, p. 364, Fig. 264. Its material is limestone.

[2] The blind-well from the Spout in the West wall of the Court was within this verandah. It took the water derived by an underground duct from a receptacle below the spout. (See *P. of M.*, i, p. 363 seqq.)

[3] The stone pier itself consists of an earlier and a later section.

[4] The fact that this whole system was constructed when the earlier phase of M. M. III was partly stratified is well illustrated by the occurrence under the foundations of the West wall of the 'Room of the Stone Pier' in its original shape, dividing it from the 'East Corridor,' of sherds of that Period. Here and within the Room itself, at the same depth

Lapidary's store of blocks of Spartan basalt.

In the Northern and larger of these two little store-rooms lay a heap of natural blocks of imported *lapis Lacedaemonius* or 'Spartan basalt', Fig. 181, a beautiful stone containing greenish white crystals of feldspar embedded in a dark green core, appreciated by the Minoan lapidaries long before it became of decorative use in Roman times.[1] Some of the pieces were too large for a single man to carry and showed parts of the original contour. One of the larger pieces presented a roughly rounded section, as if it had been intended for a column-base, a distinction that would point to a date not later than the Third Middle Minoan Period. Several pieces showed saw-cut faces, and one larger block was finely cut with a saw to a depth of 15 centimetres, representing an unfinished work.[2] It is a suggestive coincidence that the workshop, in which were found two unfinished amphoras of coarse alabaster belonging to the last days of the Palace, was situated immediately above this basement store, and it is probable, as in the case of the earlier workshop of the maker of stone lamps found in the Earthquake-stricken M. M. III house just outside the S.E. angle of the Palace, that here, too, both in the upper Lapidary's room and the basement work had been cut short by a similar natural convulsion.

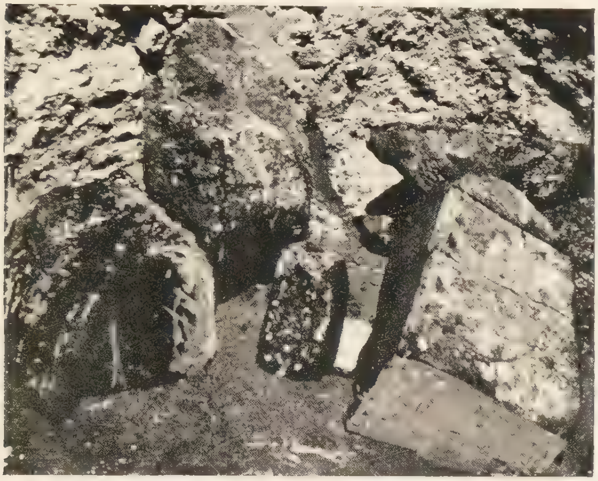

FIG. 181. WORKED BLOCKS OF SPARTAN BASALT, SHOWING SAW-MARKS, IN LAPIDARY'S STORE-ROOM.

Workshop above, with unfinished amphoras.

There seems reason for believing that some of the unfinished pieces would eventually have formed slabs for the variegated wall decoration in stonework of the lower part of walls that belonged—like the similar work for column-bases—to the older palatial tradition. The earliest example of the use of this material for vases is supplied by the fine carinated bowl

Bowl of similar basalt from 'Royal Tomb'.

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of 1·17 metres below the pavement level, was struck the early 'kalderim' pavement on which remains of the 'corded' M. M. II pithoi were found in the adjoining area (1913 tests, Nos. 14, 15, 16).

[1] See J. H. Middleton, *Ancient Rome*, p. 18.

[2] Some worked blocks of *lapis Lacedaemonius* had been also used as building material in some late repairs visible in the wall of the 'Service' stair by the adjoining upper Corridor (see A. E., *Knossos*, *Report*, 1902, p. 78).

found in the 'Royal Tomb' at Isopata (Fig. 182)[1] belonging to the latest epoch of the Palace (L. M. II), but from the signs that it bore of the re-adaptation of the handles this vessel must be regarded as an heirloom rather than a contemporary work. Its carinated form, in fact, derives from the beautifully 'keeled' bowls of translucent diorite of Fourth Dynasty Egyptian fabric, fragments belonging to several specimens of which were found on and around the Palace site.[2] It may, however, with great probability be ascribed to the Palace fabric connected with this store. Certain intaglios of Cretan provenance are known of this material, belonging to the early part of the Late Minoan Age; these, indeed, include the very fine specimen originally described by Milchoefer, representing a Minoan Genius leading a bull. The fact alone that the rock itself was derived from stone of Mount Taygetos leads us to infer that its use in Minoan Crete was posterior to the close connexion with the Peloponnese established about the beginning of the Third Middle Minoan Period. It is probable that part at least of the store of Spartan basalt found in this basement Magazine may go back to the epoch of its construction in M. M. III *b*, but its use may well have continued to the last days of the Palace. Considering, indeed, that this store lay immediately beneath the workshop of the lapidary whose work, as we shall see,[3] was rudely interrupted by the final catastrophe, we may well believe that he had some way of access to it—by means of a ladder or wooden steps—an arrangement similar to that already illustrated by the workshop of the maker of stone lamps in the house outside the South-East Palace Angle.[4]

Presumed wooden steps from lower store-room to workshop above.

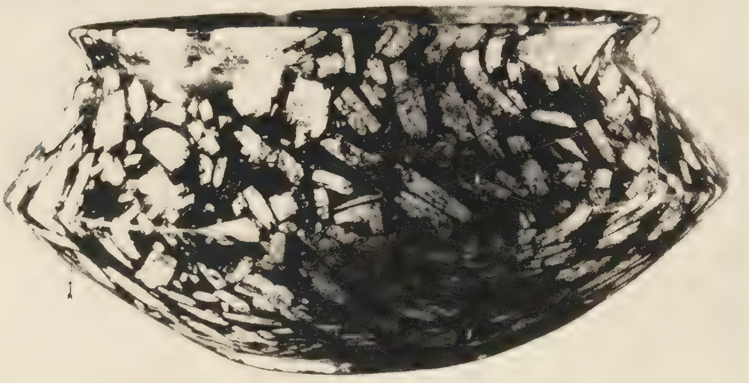

FIG. 182. BOWL OF SPARTAN BASALT FROM 'ROYAL TOMB', ISOPATA.

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[1] Reproduced from *P. of M.*, i, p. 87, Fig. 56.

[2] *Ibid.*, p. 85 seqq.

[3] See *P. of M.*, Vol. iv.

[4] *Ibid.*, ii, Pt. I, pp. 297, 298.

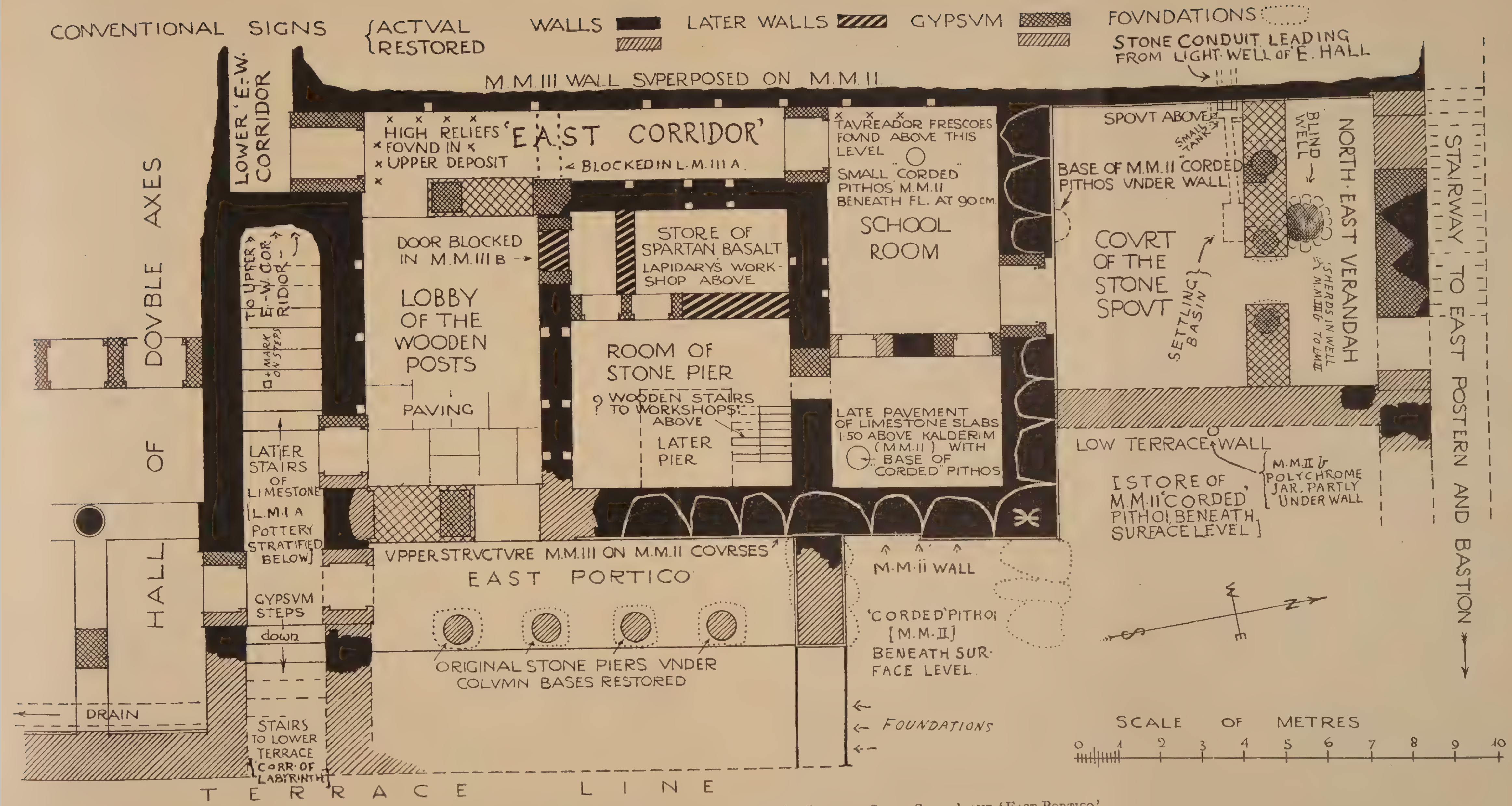
CONVENTIONAL SIGNS
ACTVAL
RESTORED
WALLS
LATER WALLS
GYPSVM
FOVNDATIONS
STONE CONDUIT LEADING FROM LIGHT-WELL OF E. HALL
M.M.III WALL SVPERPOSED ON M.M.II.
LOWER 'E-W' CORRIDOR
HIGH RELIEFS FOVND IN UPPER DEPOSIT
'EAST CORRIDOR'
BLOCKED IN L.M.III A
TAVREADOR FRESCOES FOVND ABOVE THIS LEVEL
SMALL 'CORDED' PITHOS M.M.II BENEATH FL. AT 90 cm.
SCHOOL ROOM
SPOVT ABOVE
SMALL TANK
BASE OF M.M.II 'CORDED' PITHOS VNDER WALL
BLIND WELL
NORTH-EAST VERANDAH
'SHERDS IN WELL M.M.III b TO L.M.II
COVRT OF THE STONE SPOVT
SETTLING BASIN
STAIRWAY TO EAST POSTERN AND BASTION
HALL OF DOVBLE AXES
TO UPPER E-W CORRIDOR
MARK ON STEPS
DOOR BLOCKED IN M.M.III B
LOBBY OF THE WOODEN POSTS
PAVING
STORE OF SPARTAN BASALT
LAPIDARY'S WORKSHOP ABOVE
ROOM OF STONE PIER
? WOODEN STAIRS TO WORKSHOPS ABOVE
LATER PIER
LATE PAVEMENT OF LIMESTONE SLABS 1·50 ABOVE KALDERIM (M.M.II) WITH BASE OF 'CORDED' PITHOS
LOW TERRACE WALL
M.M.II b POLYCHROME JAR, PARTLY UNDER WALL
[STORE OF M.M.II 'CORDED' PITHOI, BENEATH SURFACE LEVEL]
LATER STAIRS OF LIMESTONE
[L.M.I A POTTERY STRATIFIED BELOW]
VPPER STRVCTVRE M.M.III ON M.M.II COVRSES
EAST PORTICO
M.M.II WALL
'CORDED' PITHOI [M.M.II] BENEATH SURFACE LEVEL
GYPSVM STEPS
down
ORIGINAL STONE PIERS VNDER COLVMN BASES RESTORED
DRAIN
STAIRS TO LOWER TERRACE 'CORR. OF LABYRINTH'
FOVNDATIONS
S
N
E
W
SCALE OF METRES
0 1 2 3 4 5 6 7 8 9 10
TERRACE LINE

FIG. 183. PLAN OF REGION INCLUDING 'EAST CORRIDOR', 'COURT OF STONE SPOUT', AND 'EAST PORTICO'.

Since, in the present case, the natural access to the inner store below was by the doorway that opened into the larger space containing the stone pier, it seems probable that some kind of ladder was set up on that side, between the pier and the North wall.

'Lobby of the Wooden Posts' and adjoining 'East Portico'.

The Southernmost section of this symmetrically arranged structural block (see Plan, Fig. 183) has been referred to in the First Volume of this work as the 'Room of the Wooden Posts', from the carbonized remains of such visible at intervals on its Northern and Southern wall at the time of excavation.[1] It formed a kind of lobby or ante-room to the adjoining initial section of the East Corridor, at the point where it turned North from the Lower E.-W. Corridor, and it gave light to this by means of a balustrade. The pier—possibly combined with a column—that formed the Southern termination of the balustrade had supported a large block that belonged to the upper system on this side. As this block had served as an early landmark on the East slope, being one of the few remains of the original structure visible at the time when its excavation was first undertaken, it had at first been supported at the exact level in which it was found.[2] The more complete reconstitution of the upper story elements in this area undertaken in 1928 made it advisable, however, to restore the block, with the underlying limestone slabs on which it rested, to the level that it had originally occupied. A photographic view of the balustrade thus restored and showing the cavities formed by the carbonized posts fitted in with ferro-concrete, is included in Fig. 185.

'Lobby of the Wooden Posts.'

Block above balustrade pier raised to original position.

These posts, with the cross-beams and the intervening panels of masonry, give a very good idea of the builder's craft at the beginning of the Third Middle Minoan Period. But it has to be borne in mind that the lower part of the structure, up to the height of about 2 metres, was masked by gypsum dado slabs and the upper part with painted plaster.

Characteristic M. M. III timbering.

A curious feature of this lobby was the symmetrical reversing of the structural arrangement on its two sides, so that the pillar of the balustrade was at its Southern extremity in the one case and to the North in the other. The interval thus left in the Western line gave access to the 'East Corridor' above referred to. That of the Eastern line opened on an elongated space which proved to be a Portico, overlooking a terrace edge in front.[3] This arrangement incidentally served to let in light both to the

Symmetrical reversing of W. and E. balustrades.

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[1] *P. of M.*, i, p. 360 seqq.

[2] See *ibid.*, p. 361, Fig. 261.

[3] The original plan of this part of the site (incorporated in Plan B at the end of Vol. ii)

Lobby itself and to the section of the otherwise dark 'East Corridor' that it bordered.

The 'Eastern Portico'.

Discovery of 'Eastern Portico'.

The discovery of this Portico[1] was an important result of the supplementary explorations carried out by me in 1929 and was largely due to the removal of later accretions. Its result was to reduce the somewhat misconceived arrangement of this section of the building to a harmonious and beautiful system that greatly added here to its spacious amenities.

The massive back wall of the Portico formed part of that which shuts in, on their Eastern flank, the group of rooms above described. Though incorporated above with these M. M. III structures, it goes down to a level connected with M. M. II floors, on which the remains of a series of the great 'corded pithoi' came to light, together with fragments of mature polychrome pottery. Several of its blocks, moreover, show the early ϫ sign, deeply cut. At a point about $5\frac{1}{2}$ metres from the Southern entrance, the Portico—which was clearly defined—was closed by a massive cross-wall, forming the continuation of an inner line. This older line doubtless supported the end wall of this enclosed columnar area to the North.[2]

The back wall was interrupted on the M. M. III level by the opening leading into the adjoining 'Lobby of the Wooden Posts', and the Southern pier of this entrance showed a cutting for a fine gypsum dado slab found near it and now replaced. Traces of a similar dado were also observed by the Southern entrance of the Portico.

Massive foundation blocks of four columns.

The foundations of a stylobate running parallel to the back wall of the Portico at a distance of about two metres East of it were excavated for over 7 metres. These foundations widened out at intervals into roughly square piers of large blocks, three of them supporting the base slabs that had underlain the actual column-bases, which must have answered in diameter—about 65 centimetres—to that of the colonnades bordering the 'Hall of the Double Axes'. It was thus possible to fix the position of four equidistant column-bases (see Fig. 184) running along the Eastern stylobate of the Portico, leaving a covered space between them and its back wall, corre-

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gives the suggestion of a long magazine on this side. The elongated space thus interpreted is also erroneously placed out of line with the North-East Entrance of the 'Hall of the Double Axes' and is made to extend too far to the North.

[1] To be distinguished from the 'North-East Portico' on a higher terrace level (*P. of M.*, i, p. 386, and Fig. 280).

[2] In the Plan B referred to an enclosed space is erroneously indicated as extending as far as another massive line of cross-wall, running down East about four metres farther to the North.

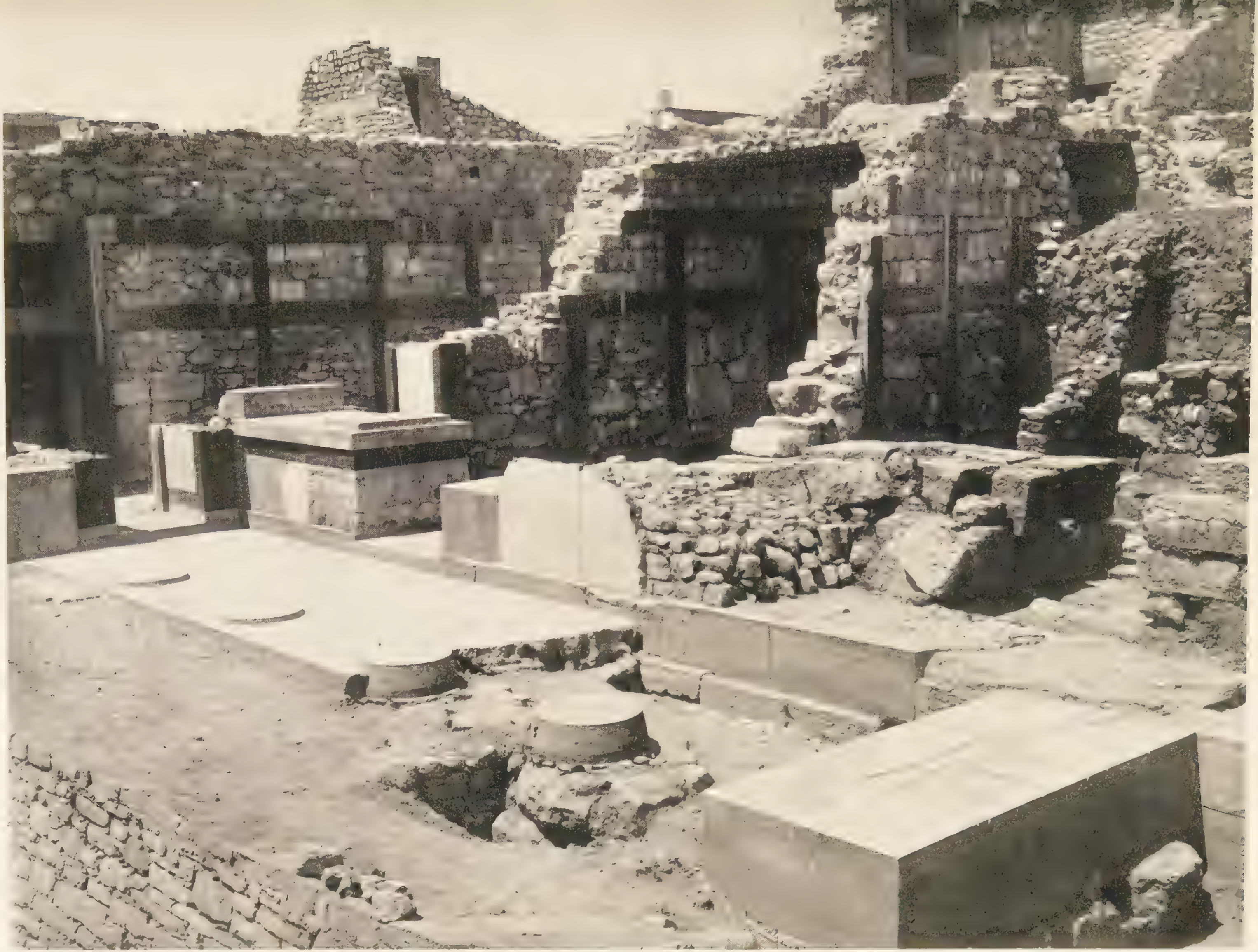

Fig. 184. 'East Portico' with 'Lobby of Wooden Posts' behind, and, to Left, N.E. Doorway of 'Hall of Double Axes'. (Column-bases above Stylobate restored.)

sponding within a centimetre or so to that between the North Columns of the 'Hall of the Colonnades' and the back wall on that side. Fig. 184 shows the Portico as restored with the 'Lobby of Wooden Posts' and opening of 'East Stairs' behind.

Agreeable open-air retreat from closed areas.

It is clear that there was also an elongated open area between the front of the Portico and the terrace edge some three metres East of it. This would have the afternoon shade and, like the Portico itself, might afford an agreeable outdoor resort. The prospect here takes in the wooded gorge of the Kairatos below and the rugged heights opposite, beneath the summit cliff of which opens the Mavro Spelio or 'Black Cave'[1]—itself, with its artificial spring chamber and inner reservoir, a Minoan Peirênê. To the left of this, the spectators on this Palace belvedere might have watched funeral processions, that had first crossed the stream, wending their way upwards, by a zigzagging ramp still visible—the Path of the Dead—to their last resting-place in the early rock chambers ranged along successive terraces of the limestone steep.[2]

This sheltered resort, looking East and protected to the North and South from the prevailing winds, was conveniently placed with an entrance opposite that of the North-Eastern section of the 'Hall of the Double Axes'. From the light-courts of this, shut in by high walls from the outside view, it was doubtless a great advantage to be able, by merely stepping across the passage-way, to enjoy the fine prospect and fresher air afforded by the neighbouring Portico. If, moreover, as we may reasonably suppose, it had supported a columnar balustrade enclosing a similar area above, this in turn would have supplied similar amenities to the Hall above that of the 'Double Axes' as originally constructed.

The Later 'East Stairs'.

Later 'East Stairs'.

Between the 'Lobby of the Wooden Posts' and a part of the East section of the 'Hall of Double Axes' is an interval that originally answered to an Eastward prolongation of the 'Lower E.-W. Corridor',[3] beyond the point where it takes its Northward turn. This Eastern section of the Corridor was blocked at a late epoch in the Palace history, as a consequence, we may infer, of some partial destruction of the building that had followed, after an interval, on the Great Restoration about the close of M. M. III *b*. This itself may be probably connected with an earthquake shock, not so violent as the preceding, but which seems to have done considerable damage to the building towards the close of the early phase of L. M. I.

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[1] Explored by Mr. E. J. Forsdyke in 1928 (see *B. S. A.*, xxviii, p. 248 seqq.).

[2] Forsdyke, *loc. cit.*, p. 245 seqq., and p. 250 seqq.

[3] *P. of M.*, i, p. 355. It is there suggested that the Eastern end of this Corridor may have stepped down to the terrace level below and have turned thence South along the interval between the two innermost enceinte walls on that side, which itself seems to mark the course of a passage-way to which the Labyrinth Fresco (*ibid.*, p. 357, Fig. 256) had belonged.

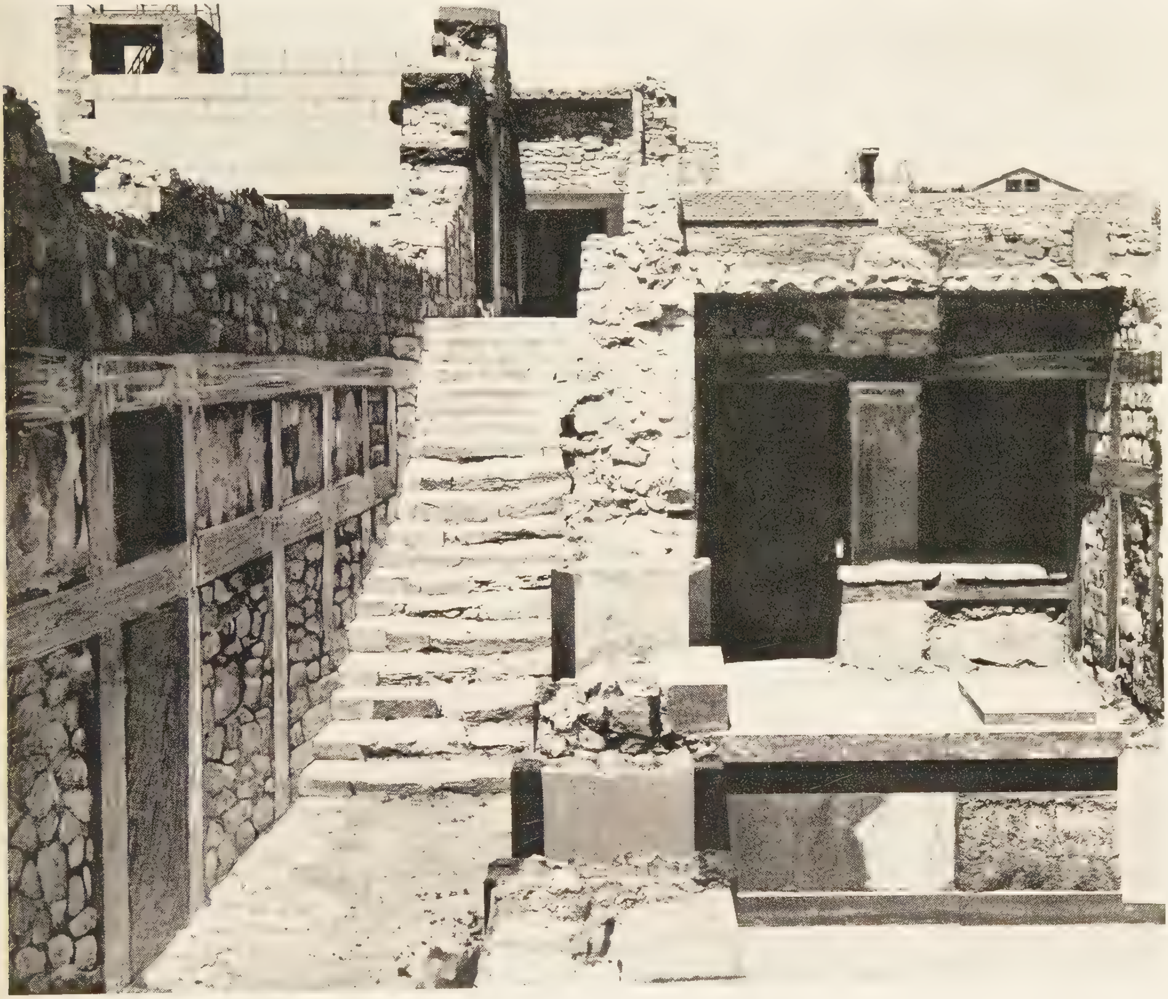

FIG. 185. LATER 'EAST STAIRS' WITH 'LOBBY OF THE WOODEN POSTS' AND PART OF 'EAST PORTICO' TO RIGHT.

At this point, near a considerable drop from the upper to the lower terrace level on the East slope, there seems to have been a serious collapse of a part of the upper floor, which had ruined the outer section of what may now be termed the 'Middle E.-W. Corridor'. Instead of rebuilding this

Constructed after a seismic collapse.

at its old level, however, the Minoan architect seems to have seized the occasion of supplying a more direct access from the upper to the lower floor on this side by constructing a staircase that led directly down to the lower level. This staircase consisted of twenty steps of a limestone closely recalling that of the 'Stepped Porch' West of the Central Court. They showed small incised squares, a mark not found elsewhere, and the fact that the steps were of limestone suggests that they were, in part at least, open to the sky. The lower landing lay just outside the door leading to the Eastern light-area of the 'Hall of the Double Axes'. On the other side was an entrance to the 'Lobby of the Wooden Posts' and the rooms connected with it, while a second door-opening gave access to the agreeable little enclosed 'East Portico' above described.

The 'East Stairs', now constructed, thus led directly to the landing-point—immediately E. of the adjoining doorway of the 'Hall of the Double Axes'—of an earlier flight, probably consisting of an equal number of steps, which led up from the terrace level below. Of these steps remains of two were brought to light in position by the later excavations and from the gypsum material of these it is evident that they were originally under cover.

Great deposit of L. M. I *a* pottery beneath steps.

In order to ascertain the relative date of the construction of the later flight of stairs leading directly down from the 'Middle East-West Corridor' I had a series of test excavations made beneath the steps near the top and, again, near the bottom of the flight. The result of these was to bring out a mass of pottery, all homogeneous, and belonging to the earliest phase of L. M. I. Its general *facies* a good deal resembled that of the pottery of about the same date from the Well of Gypsádes.[1] The graceful tufts of grass or reeds formed a favourite kind of decoration for cups and other vessels. Amongst the forms represented were elegant 'fruit-stands' with high pedestals and a bossed centre to their bowls, resembling those in a derivative Melian style found in the Pillar Room of Phylakopi.[2]

Vessels of ordinary use.

Numerous industries within Palace walls.

The vessels as a whole must have represented the ordinary crockery in use among the humbler inhabitants of the building, including the menials and craftsmen who worked within the Palace walls, rather than as part of the special services of the Minoan lords themselves. These craftsmen seem to have been very numerous and, as in the case of Indian Palaces to-day, there is evidence that artisans plying various industries occupied whole quarters of the building. The manufacture of pottery, of which we find a highly artistic record in the 'Royal Pottery Stores' themselves, continued in one shape or another throughout every phase of the Palace history.[1] Of the existence of a faïence factory on the site we have abundant indications. Unfinished stone vases and wasters of more than one period tell their own tale, and to these must be added the discovery, above mentioned, of the store of partly worked blocks of 'Spartan basalt' and the actual work-room of a lapidary belonging to the last Age of the building.

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[1] *P. of M.*, ii, Pt. II, pp. 549, 550, and Fig. 349. Practically all the decorative designs shown in the group from the Gypsádes well, including many combinations of spirals and disks, were represented in the deposit beneath the 'East Stairs'. To these must be added parts of a floral design.

[2] *Phylakopi*, Pl. XXVII, 1 and p. 138, Fig. 110, also *B.S.A.*, xvii, Pl. VIII, 91.

Minoan Flower-pots.

Minoan flower-pots.

Among types of vessels well represented in the deposit beneath the 'East Stairs' was one that throws an agreeable light on the home life of this industrial population. These are the high vases of elegant form—often adorned with the favourite designs of reeds or grasses—and showing perforations in their bases recalling those of modern flower-pots (Fig. 186). Like flower-pots, too, they were mostly handleless, and there can be little reasonable doubt that they served a similar purpose. It is to be observed, moreover, that, though the decoration of flower-pots or flower-vases with floral motives is a constant characteristic of bad art in modern times, the depicting of grasses on their surface in no way conflicted with the natural display for which they were intended. The same may be said of the fern-like fronds and sprays of rose leaves seen on the sides and margin of the beautiful handled chalices of faïence from the 'Temple Repositories'[2] in which we may recognize flower-vases. (Reproduced in Fig. 187 A, at end of Section, p. 281.)

There is indeed evidence that the decorative flower-pots themselves were at times also provided with handles. A good Knossian example of this, with finely delineated grasses, is given in Fig. 187. Its hole below is only a centimetre in diameter.

We may conclude that the little light-wells of houses belonging to the industrial denizens of the site were brightened up in a manner still usual in Oriental countries and in Greece itself by flowering-plants in pots. It seems certain that the richer burgher class and the Priest-kings themselves could not have been behindhand in their interior garden cult, and it may well be that tubs with larger plants chosen for their bright flowers, fragrance, or ever-

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[1] Some remains of an M. M. III potter's stratum came to light above the fine polychrome pottery of the 'Royal Pottery Stores' in the North-East part of the site. The 'North-East Magazines' were stacked with the ordinary ware of the closing M. M. III Period, and on an upper layer here occurred traces of a store of L. M. I *a* pottery. (See *P. of M.*, i, pp. 570, 571.)

[2] *P. of M.*, i p. 499, Fig. 357.

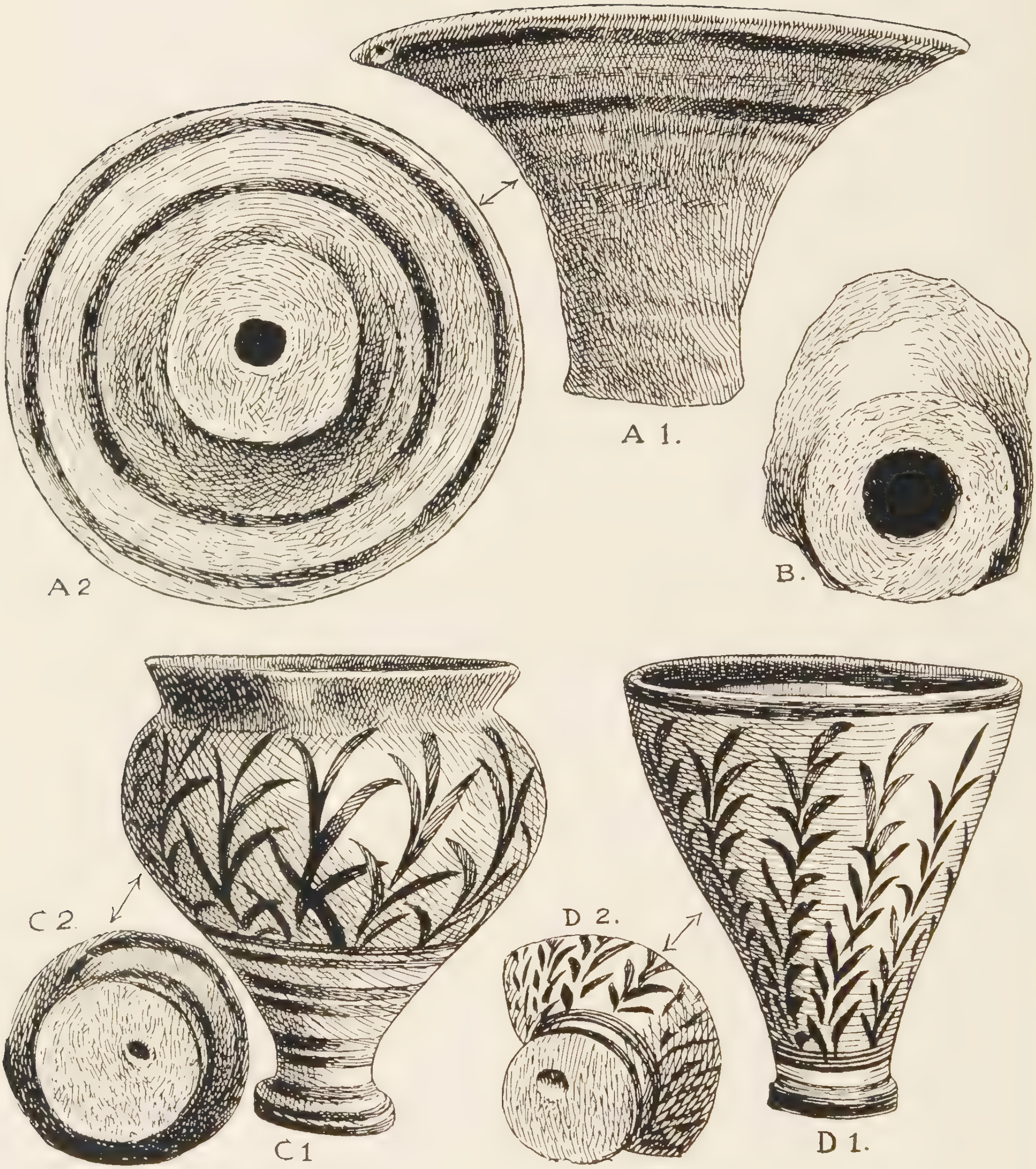
A 1.
A 2
B.
C 2.
C 1
D 2.
D 1.

Fig. 186. Minoan Flower-pots: perforated below (L. M. I *a*). (*c.* $\frac{1}{3}$)

green foliage were set in the larger light-areas of the building or even in the Central Court. From the floral designs that appear on wall-paintings like those of the 'House of the Frescoes'[1] belonging to the beginning of the New Era, we may perhaps make a choice of Madonna and Pancratium lilies, wild roses, irises, honeysuckle, convolvulus, wild peas or vetches, and, for fragrance and beautiful foliage combined, myrtles, together possibly with nursling palms, as likely to have adorned these inner Courts. The bright geraniums and odorous carnations of the modern Cretan house-yards are, of course, of much later introduction.

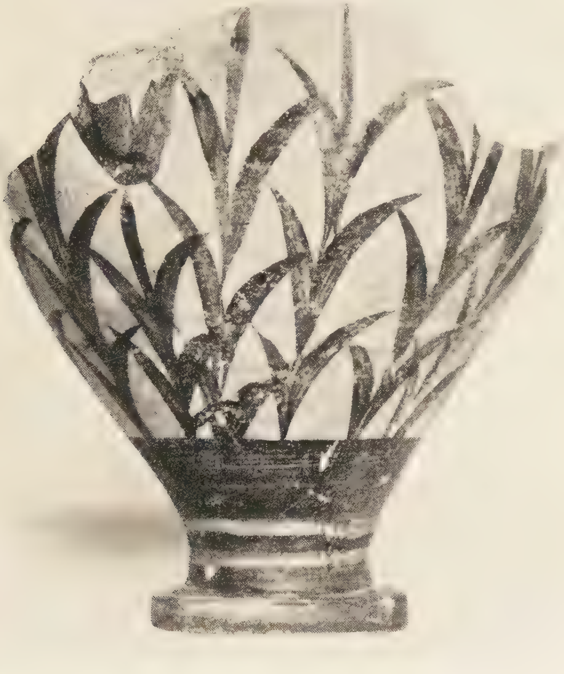
Fig. 187. Minoan Flower-pot (L. M. I *a*).

Date of East Staircase Deposit.

Ceramic stage of pottery under stairs—mature L. M. I *a*—compared with other contemporary deposits.

Amongst the motives supplied by the abundant sherds of the Staircase deposit not one approached the style of the later phase, *b*, of L.M. I, which, as already noted, can be shown, on the basis of finds in Egyptian tombs of Thothmes III's time, to be roughly dated to the period 1500–1450 B.C. On the other hand, not only did many fragments show the continuance of the practice of overlaying an evanescent white paint on black glaze decoration, but in some cases designs in this technique were overlaid on a reddish brown ground suggestive of Middle Minoan tradition. There also occurred some remains of 'medallion pithoi' dating not later, at any rate, than the post-seismic M. M. III phase. In view of the survival of these earlier elements, the date of this deposit must be brought well within the limits of the second half of the sixteenth century B.C., and may with great probability be set down as round about 1520 B.C.

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[1] *P. of M.*, ii, Pt. II, p. 454 seqq.

Widespread Evidences of Partial Catastrophe and Restoration towards End of L. M. I *a*.

Evidence of severe dislocation 1520 B.C.

It is to this approximate date, then, that we must also ascribe the construction of the East Stairs and the partial catastrophe that had led to this new arrangement. The steps themselves are of an exceptionally hard grey limestone material, resembling, as already noted, that of the Stepped Portico, West of the Central Court. The chronological evidence as to the latter flight, moreover, also points to a more or less contemporary date. It is clear that it was earlier than the adjacent Antechamber of the 'Room of the Throne', which was certainly a work of L. M. II. On the other hand, a *pithos* found beneath the upper steps and platforms of this Portico belonged to a stratum intermediate between the M. M. III cists below—a continuation of the 'Temple Repositories'—and the constructions above.

Signs of a similar dislocation and renovation at this epoch were also found beneath the pavement of the eighteenth West Magazine in the shape of a group of L. M. I *a* cups and amphoras showing well-marked traces of the powdery white paint. It may be added that, beneath the pavement by the North doorway of a small columnar chamber adjoining the 'South Propylaeum' on the West,[1] an exceptionally large deposit of L. M. I *a* pottery came to light, identical in its general *facies* and in the forms of vessels found,[2] with the ceramic materials that lay beneath the 'East Stairs'. Here, again, we may trace the result of some partial catastrophe in that part of the building which, indeed, may well have given occasion for a scheme of redecoration at this Epoch, such as seems to be implied by the style of the Processional Frescoes on the neighbouring walls.[3]

Evidences, indeed, are forthcoming of works of restoration pointing to some seismic disturbance in the earlier part of the L. M. I Period, not only in the Palace itself, but in some of the surrounding houses. In the case of the 'South House' built in the post-seismic M. M. III *b* phase there are abundant proofs of a remodelling at this epoch, including the filling in of the basin of the lustral area,—M. M. III *b* sherds in all cases underlying the later work, itself associated with L. M. I *a* pottery.

It further appears that the section of the Domestic Quarter adjoining the 'East Stairs' of the 'Middle E.-W. Corridor' to which they led, had also suffered considerable damage at this epoch. From a series of tests undertaken by me in 1913 beneath the gypsum pavements of the ground-floor, in the great Halls and adjoining area, it resulted that, though as a whole this arrangement belonged to a time when no sherds later than M. M. III *b* were about, there was visible in parts of this region a distinct admixture of L. M. I *a* pottery beneath the slabs raised for this examination. This was notably the case in both sections of the 'Queen's Megaron' and in the adjoining Bath-room. It is fairly certain, indeed, that the spiral frieze found partly in position in the latter room belongs to this Period and with it must be included a whole series of remains of friezes—set immediately above the gypsum dadoes—in a similar style. We must conclude that a good deal of superficial renovation, accompanied by a general redecoration, was carried out at this time in these important Palace halls and their borders. As will be later demonstrated, there is evidence that, on the very eve of the final destruction of the building, a new scheme of decoration in the latest Palace style (L. M. II), resembling that of the 'Room of the Throne', had been set in hand in the 'Domestic Quarter'.

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[1] Restored in 1929.

[2] Many fragments occurred, for instance, of 'flower-pots' similar to those described. There was here also a distinct survival of remains of M. M. III 'Medallion Pithoi'.

[3] The suggestion that the Processional Frescoes were due to a redecoration of the walls in this region in the 'mature L. M. I *a* ceramic stage' was already made in *P. of M.*, ii, Pt. II, pp. 735, 736.

Evidence supplied for dating spiral decoration in neighbouring halls.

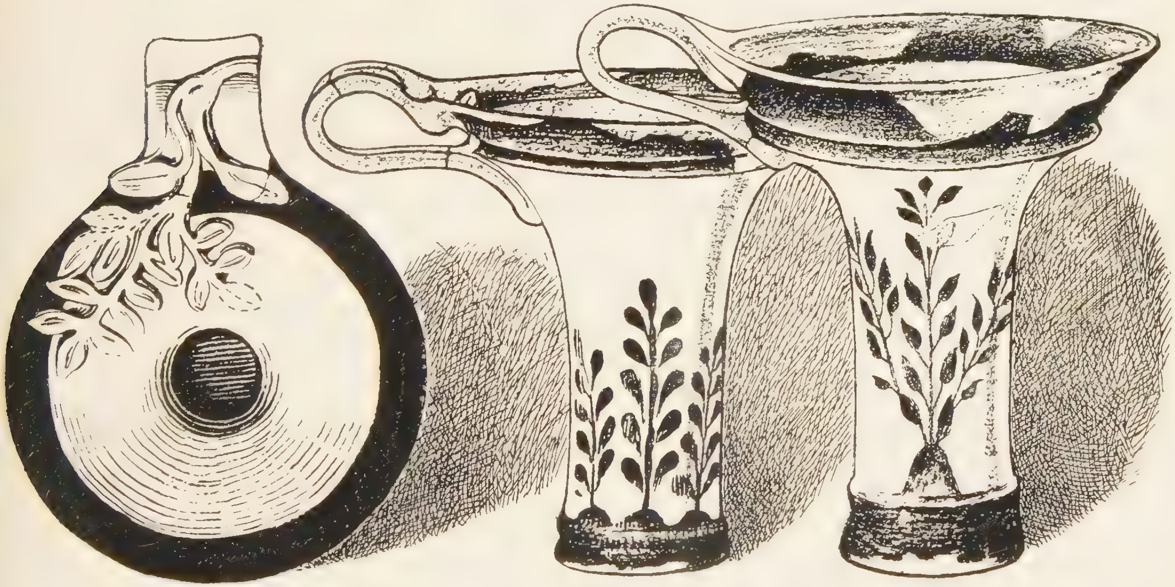

FIG. 187 A. FAÏENCE FLOWER-VASES DECORATED WITH FERNS AND ROSE-LEAF SPRAY: TEMPLE REPOSITORIES.

§ 81. FURTHER RECONSTITUTION OF THE 'DOMESTIC QUARTER'; GENERAL VIEW OF THE UPPER STORY SYSTEM.

Erroneous popular impression of Palace as a Maze; True derivation of name 'Labyrinth'; Maze as sphragistic motive of Egyptian origin; Regular and four-square construction of Palace; Scientific planning of 'Domestic Quarter'; Comparative isolation of Women's Chambers; Exceptional preservation of 'Domestic Quarter'; Surprising discovery of Grand Staircase—difficult tunnelling; Fallen materials, petrified by gypsum percolations, support upper stories; Re-supporting and restoration of floors throughout Quarter a necessary work; Reconstitution facilitated by use of ferro-concrete; Flooring over of Lower Stories of 'Domestic Quarter'; Restoration of floor of 'Upper Hall of Double Axes'; The System of Light-wells; Light-courts necessary protection against fierce South-East and North-West winds; Wind erosion of rocks due to S.E. blasts—slits cut in cliffs and Palace wall; Upper Story System above Great Halls; Fragment of L. M. II fresco in situ *on wall; Decorative frieze associated with 'Upper Hall of Double Axes'—contemporary with spiral friezes of this area; West Light-well of Hall; Special facilities for social inter-communication between Upper and Lower Hall; Partial segregation of sexes; Private Chamber (Thalamos) above 'Queen's Megaron'; Windowless Chambers for Treasury and Archives—These connected with a Shrine of the Double Axes; Room of Stone Bench; Fragments of Processional Fresco—belong to partial restoration towards close of L. M. I* a*; Service Staircase; Compact planning of inner region.*

Erroneous popular impression of Palace as a maze.

SOME general account of the 'Domestic Quarter', set in the Great Cutting on the East slope of the site, has already been given in the First Volume of this work,[1] though a more special description of its important halls was there reserved for later Sections.

The preconceived idea that the Palace that occupies the traditional seat of Minos was itself of a labyrinthine nature dies hard. In the days of ruin and desertion, with choked gangways and disordered lines of walling, with subterranean ducts, along which a stooping man might make his way, but which were really great stone-built drains, and, above all, the appearance of girl performers grappling with charging bulls, which in the portico of the Northern Entrance had kept their place down to the coming of the Greeks[2]—mysterious forms and features such as these, seen in the twilight of early saga, may well have called up the vision of the 'Greek Labyrinth' together with the monster that abode within its inmost lair.

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[1] p. 325 seqq., § 17.

[2] See above, pp. 190, 191.

True derivation of name of 'Labyrinth'.

The name itself, as has already been pointed out,[1] is proper to the building, but from the old Carian analogies it simply defines it as the sanctuary of the *labrys* or double axe, the symbolic weapon of Minoan divinity, worshipped in the Palace shrines and so often repeated on its blocks and pillars. Among the Anatolian parallels supplied by the later cult of Zeus Labraundos, we have no hint of such sanctuaries having taken a labyrinthine form. The 'Labyrinth Fresco' from the Corridor East of the 'Hall of the Double Axes'[2] is another matter, but it depends on a decorative tradition taken over, apparently, together with other sphragistic elements, from Egyptian models of the Sixth and succeeding dynasties.[3] Rude human figures set within these Egyptian maze designs may indeed suggest that folk-tales were already rife on that side of the same kind as those that in Greek days were attached to the house of Minos on the site of Knossos. But, though the maze appears upon its walls, and bull-headed human forms recur—together with similar composite forms—on Minoan gems, and were beginning perhaps to acquire a mythological signification,[4] the definite association here of Minotaur and maze, such as we see on the coins of Knossos, was an afterwork of Hellenic days.

Maze as sphragistic motive for Egyptian origin.

Regular and four-square construction of Palace.

In the Minoan Palace Sanctuary as actually planned, so far as it has been possible to decipher the remains, there was nothing of these baffling involutions and tortuously secretive approaches. The building—pieced together by means of a series of 'insulae'—roughly four-square round a Central Court, with main approaches North and South and others at the remaining sides, though of vast scale and designed to cover a multiplicity of various needs, was in its essence a practical work-a-day construction. In some respects, as in the substitution of a state entrance Corridor—made to wind round the South-West Angle of the Palace—in the place of a passage running directly in from the West, later arrangements have rendered the original plan somewhat more elaborate. In such structures as the Pillar basements and of the Northern Lustral area, with its stepped descent towards the bosom of Mother Earth, we may recognize elements of religious mystery, deliberately designed. The small basement Chambers and the long series of Magazines in the West wing of the building might by themselves give the idea of a complicated plan, much broken up by details, but the continued researches that have now made it possible to restore the outline of the greater part of the upper story in that region have there too brought out its essential simplicity. The imposing unity of its main features is well displayed in the Plan C at the end of the Second Volume of this work. We see the State Corridor winding round to the ascending system of the Lower and Upper Propylaeum, the Central Tricolumnar Hall beyond, of which we have the complete evidence, the spacious open Corridor beside it, the Great Halls so well demarcated above the West Magazines, the Central Staircase, and the Stepped Porch that gave such dignified access from the Central Court.

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[1] *P. of M.*, i, p. 6.

[2] *Ibid.*, p. 356 seqq., and Fig. 256.

[3] *Ibid.*, p. 359, Fig. 260, *a–c*.

[4] See below, pp. 316, 317, for sacral symbols associated with the Minotaur on gems.

There is nothing in all this to suggest a labyrinthine plan. The whole is broadly and straightforwardly laid out, and yet the modern traveller in approaching the Minoan Palace too often places himself on the Classical standpoint and seeks a material illustration of the Labyrinth as Virgil had imaged it:

Parietibus textum caecis iter ancipitemque
Mille viis habuisse dolum, qua signa sequendi
Falleret indeprensus et irremeabilis error.[1]

From this to the discovery of the Minotaur himself seems to be only a step.[2]

The 'Domestic Quarter': its Scientific Planning.

Scientific planning of 'Domestic Quarter'.

Even more does consummate skill in architectural design combine itself with adaptation to practical needs in the case of the 'Domestic Quarter' on the Eastern slope. The ground-plans of this and the first floor are repeated in folding Plates E and F at the end of this Volume, from those based on the drawings of Mr. Theodore Fyfe and of Mr. Christian Doll already given,[3] but with a few additions and corrections, the result of later researches, here incorporated. The view of part of the 'Domestic Quarter' with its upper elements restored given in the photographic Figure 188, as seen from the tower of observation in the Central Court, shows a spacious architectural design, for all its elaborate arrangement.

As a compact and unitary plan this residential section of the building is an admirable composition. The 'Grand Staircase', starting from near the level of the Central Court, served at least three floors, and its well gave light to magnificent *loggias* and corridors as well as to the window

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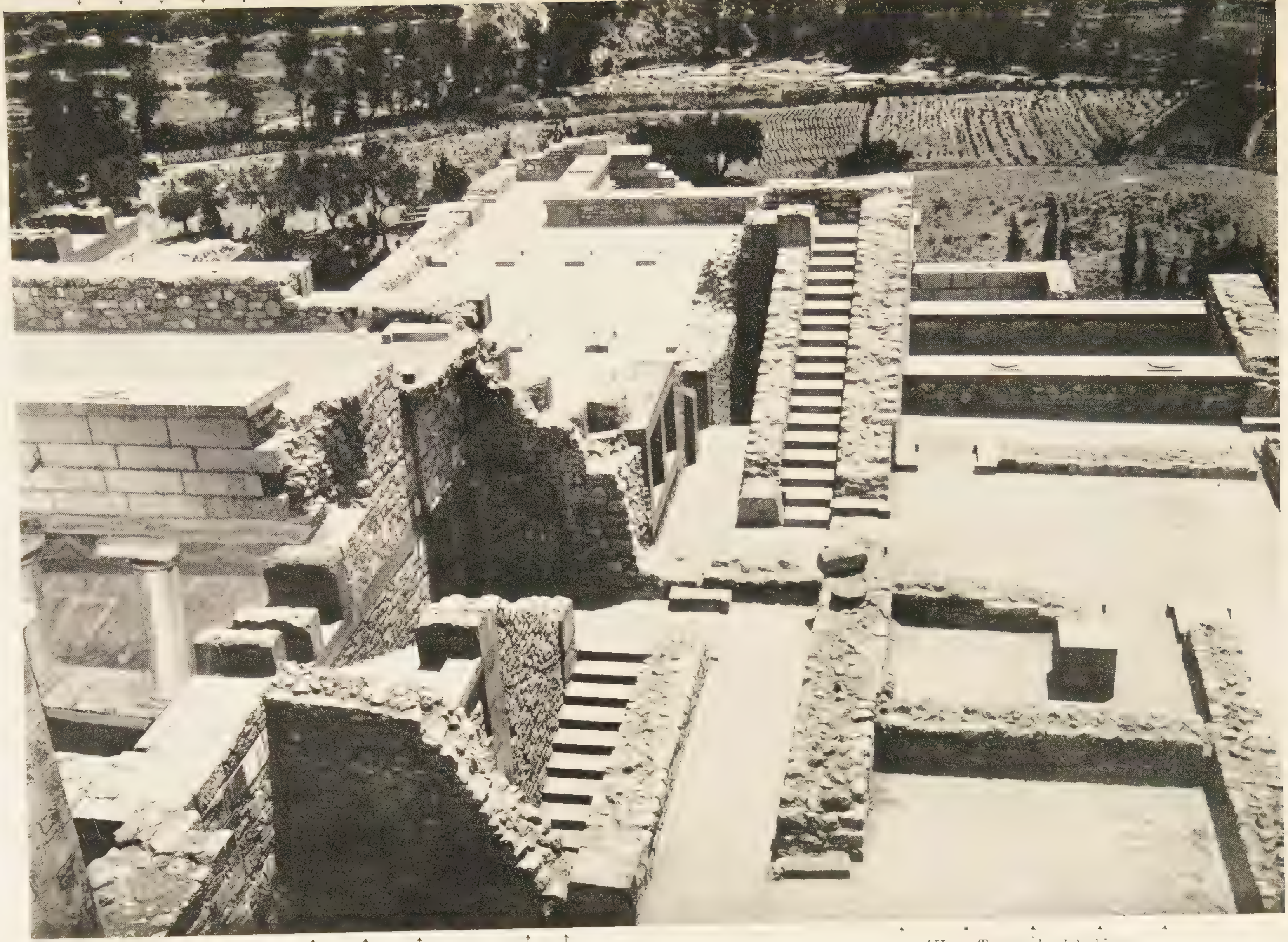
[1] *Aen.* v. 589–91.

[2] It was reserved for the Correspondent of an up-to-date journal of a Far Western city to satisfy the demand by publishing an imaginary plan of the Palace as excavated—round in shape with a symmetrical maze of passages leading tortuously to a central chamber containing a man-headed Bull.

[3] *P. of M.*, i, Figs. 239, 240: following p. 328.



Fresco visible below.
Well of Grand Staircase and 'Loggia of Shield Fresco'.
'Court of the Distaffs.'
Service Stairs.
'Upper Treasury' and Archives. (Upper Bath Room beyond.)

FIG. 188. VIEW OF RESTORED UPPER STORY OF 'DOMESTIC QUARTER': FROM OBSERVATION TOWER.

openings of a service staircase bordering its South wall. It gave access, by the 'East-West Corridors' of successive floors, to what must have been the principal living and reception rooms of this region, attaining the greatest dimensions in the 'Hall of the Double Axes', which, being on the ground-level, included the surrounding light Courts in its area.

Comparative isolation of Women's Chambers.

The calculated skill in the structural arrangements of what was the inner home of the priestly rulers who have left their record here in the name of Minos was nowhere more conspicuous than in the comparative isolation of what we have reason to believe was the Women's Quarter. The 'Queen's Megaron', as will be seen, is separated by a short but crooked passage—the 'Dog's-leg Corridor'—from the great reception Hall. Its dual compartments with partial openings between, the private staircase to Upper Chambers—equally shut off—its little bath-room, and the alcoves opening into an inner area, were all so many nicely planned additions to its amenities, while the inner, private quarters, though close at hand, were yet separated off by a winding passage. The elaborate drainage system of this part of the residential block has already found its description—the stone-built conduits and shafts bringing down the surface waters of that part of the roof, the up-to-date sanitary arrangements, the little 'Court of the Distaffs' with its stone bench. This 'Domestic Quarter' included no less than six light-areas, varying from mere wells to spacious Courts, and affording an admirable method of supplying air and light to the dwelling rooms and halls with a minimum exposure to the fierce winter winds and blazing summer sun of the Cretan climate.

Exceptional preservation of 'Domestic Quarter': its causes.

The preservation of the 'Domestic Quarter'—greatly due to the comparative protection against earthquake shocks afforded by the Cutting on three sides into the Neolithic strata of the 'Tell'—had more the aspect of a miracle than anything that excavation might reasonably have been supposed to bring to light. The 'Grand Staircase', especially—of which three flights were unearthed in their entirety and sufficient evidences of two more—now once more restored to such a condition as to fulfil its original functions after an interval of over three and a half millennia—still stands forth as a monument of constructive skill.

Surprising discovery of 'Grand Staircase'.

In the whole exploration of the Palace site the most surprising development was that which occurred on emerging South from the Corridor of the Bays that flanked the Royal Magazines where the 'Medallion Pithoi' were stored.[1] The pavement that was followed out, resting on the Neolithic clay, seemed to represent the level above and below which it was hopeless to expect further remains in this direction. The hot season had begun and the work of excavation had in fact begun to grow rather weary when, on opening out here a blocked doorway, a landing came to light, beyond which further clearance showed an ascending and descending flight of gypsum steps,—afterwards discovered to belong to the second and third flight of a magnificent stone staircase.[1]

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[1] See *P. of M.*, i, p. 325 seqq. (§ 17).

Mining Operations down 'Grand Staircase'.

Difficult tunnelling.

Something has been already said of the peculiar difficulties and even dangers encountered in making our way down the lower flights and through the corridors and halls of the ground-floor beyond. It was certainly a fortunate circumstance that amongst the workmen then employed were two from the Laurion Mines, and under their guidance we were able, with the constant use of mine props, to tunnel down the lower flights and along the vaults beyond. It was then realized that though the massive wooden framework that played so great a part in the structural features of the last Middle Minoan Period, including substantial posts and cross-beams as well as the wooden columns and capitals, was reduced to a carbonized condition—more by chemical action than by fire—the fabric for the most part was still held in position, in places even as far as the level of the second story.

Fallen materials petrified by gypsum percolation support upper stories.

This was the result of the intrusion into the spaces below of fallen materials mostly, no doubt, sun-dried bricks from the uppermost stories of this part of the building. But the full explanation of the phenomena was not supplied till later, when the 'Caravanserai' on the opposite side of the gorge to the South of the Palace was excavated. It was there found that the springs on that side, which were largely impregnated with gypsum, combining with the native clay and in this case too with crude bricks fallen from above had formed a concretion as hard as cement and which could only be penetrated with sharp steel picks at the cost of considerable time and labour. It is clear that the same result as that naturally produced by the springs from the Gypsádes hill beyond acting on the clay materials, had in the case of the covered spaces of the lower floors and flights of stairs been owing to the dissolved effect of rain-water on the debris of the gypsum blocks, pavements, and dado slabs of the uppermost stories. The deleterious effect of rain on the gypsum elements of the Palace is rapid in its action, and the progress of disintegration has made itself very perceptible in exposed parts of the building since the first days of the Excavation. The extent to which the gypsum is liable to be thus dissolved depends, it is true, on the individual consistency of the stone. Some of the earlier Palace slabs are of specially fine quality, with waving translucent veins and laminations pale, brown and amber tinted, and such seem to have still an almost unlimited power of resisting the elements. But exposed surfaces as a rule are gradually reduced to a rough mass of crystals, and in some cases one is almost tempted to compare the effect of a drop of water on a lump of loaf sugar.

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[1] See *P. of M.*, i, p. 326 seqq.

Re-supporting and restoration of floors throughout Quarter a necessary work.

One inevitable conclusion from this disintegrating process was that in order to save any part of such remains it was necessary that they should be covered over. But the excavation of the staircase and the halls it served brought with it still more urgent needs. The hewing away of the clay concretions and the extraction of the various rubble and earthy materials of the intervening spaces left a void between the upper and lower spaces that threatened the collapse of the whole. The carbonized posts and beams and shafts, although their form and measurements could be often observed, splintered up when exposed and, of course, could afford no support. The recourse to mine props and miscellaneous timbering to hold up the superincumbent mass was at most temporary and at times so insufficient that some dangerous falls occurred.

New Era in Reconstitution due to Use of Ferro-concrete.

To relax our efforts meant that the remains of the Upper Stories would have crashed down on those below, and the result would have been an indistinguishable heap of ruins. The only alternative was to endeavour to re-support the upper structures in some permanent manner. In the early days of the Excavation the Architect, Mr. Christian Doll, who manfully grappled with this Atlantean task, had perforce largely to rely on iron girders, brought from England at great expense, and these were partly masked with cement.[1] The shafts of the columns were replaced by stone blocks concealed by a stucco coating and the capitals were actually cut out. Even then, wood, which it was hard to obtain properly seasoned, was allowed to play a part in these reconstructions. The cypress trunks and beams that had supported such masses of masonry in the old work were of course no longer obtainable, but we had to learn that even the pinewood of Tyrol, imported through Trieste,—which in the chalets of its own country might have resisted the elements for generations,—could be reduced to rottenness and powder in a few years by the violent extremes of the Cretan climate.

But, with the increasing use of ferro-concrete—the material of which is reinforced by thick iron wires—for constructive work of all kinds, a new era

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[1] See *P. of M.*, i, p. 328.

Reconstitution facilitated by use of ferro-concrete.

of reconstitution and conservation opened on the Palace site. It has already been shown how in the West wing of the building the new method made it possible much more efficaciously and cheaply to replace upper floors with the old elements at the same time set on their proper level, while columns, capitals, and other features, even those involving elaborate details, had no longer to be hewn and carved from the actual stone, but could be 'cast' wholesale in wooden moulds, which the native carpenters were skilful in turning out. The carbonized beams and posts were at the same time restored by the same methods in the new cement material, while, by flooding it over a temporary boarding, supported by posts below, it was possible to lay out considerable areas of the pavement and at the same time permanently to protect from the weather the gypsum slabs and blocks and other perishable features of the basement rooms and magazines.[1] The whole framework of the building on this side was so well compacted together by this new material that it successfully resisted the severe earthquake of June 26, 1926.[2]

Flooring over of lower stories of 'Domestic Quarter'.

Hitherto, however, a great lacuna in this work of reconstitution and conservation had presented itself on the side of the 'Domestic Quarter'. Owing to the prohibitive expense of the original methods it had been impossible for me to attempt the roofing over of the 'Hall of the Double Axes', the greatest of the Palace chambers preserved to us, or the permanent maintenance in their position of the numerous elements such as the double series of doorways of the hall above it, up to now only temporarily supported. The practically complete remains of the lower pavement and the more partially preserved gypsum dadoes and stucco coating of the walls were themselves in a state of rapid disintegration. The spaces here to be spanned were greater than elsewhere, and the difficulties in our way may be illustrated by the fact that two of the larger iron girders sent from England for use in the 'Domestic Quarter' lie at the bottom of the Candia harbour, the risks that beset landing at this port through a stormy sea having been exceptionally great previous to the construction of the new mole.[3]

In view of the successful results of the undertaking in the Western wing of the Palace, however, I finally decided to roof over the Hall of the Double Axes and to reconstitute some of the other upper-story structures bordering this area. This considerable task, on which about 100 carpenters and masons and their assistants were employed for nearly six months in 1928, was admirably executed for me by Mr. Piet de Jong, the Architect of the British School at Athens, who had the benefit of the experiences already obtained by him from the similar kind of work in the West Quarter.

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[1] *P. of M.*, i, p. 350 seqq. See, too, A. E., *Antiquaries Journal*, 1927, p. 258 seqq.

[2] Hardly any damage was visible except a horizontal crack in the shaft of a restored column of the Central staircase.

[3] This mole now runs out N.W. from the Castle point of the old Candia harbour, and thus protects its entrance from the worst gales. It has been constructed for the City of Candia by Sir Robert McAlpine and Sons under the direction of Major Wilfrid de Lacy.

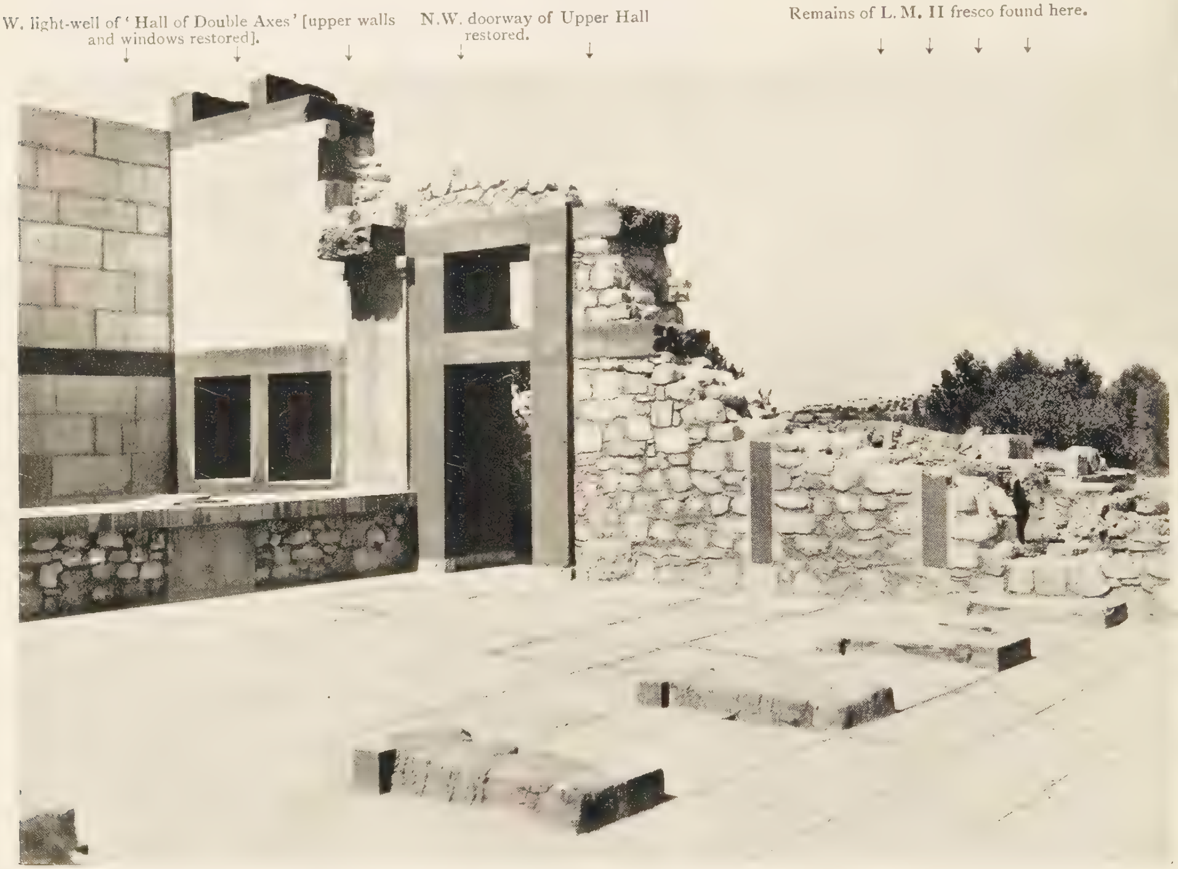
W. light-well of 'Hall of Double Axes' [upper walls and windows restored].
N.W. doorway of Upper Hall restored.
Remains of L. M. II fresco found here.

FIG. 189. VIEW OF RECONSTITUTED WEST END OF 'UPPER HALL OF DOUBLE AXES'. LIGHT-WELL BEYOND AND TO LEFT ENTRANCE FROM 'MIDDLE E.-W. CORRIDOR'.

'Upper Hall of the Double Axes.'

Restoration of floor of 'Upper Hall of Double Axes'.

Figs. 189, 190 give views of the restored sections of the floor of what has been conveniently termed the 'Upper Hall of the Double Axes', though there had doubtless originally existed another co-extensive hall immediately above it. The Western Section, Fig. 189, is shown looking towards the N.W. door of the 'Upper East-West Corridor'. On the left, beyond the restored balustrade, opens the light-well on that side, with upper courses of masonry and North window reconstituted. The Central and Eastern Sections of the Hall are shown in Fig. 190.[1] Here the door-jambs and intervening gypsum slabs of the first row had been almost entirely preserved, though when first uncovered they were somewhat below their original level, owing to the carbonization of the great cross-beams below, now restored in cement. Parts of the second row were also found, but at a lower level. The balustrade which had originally existed beyond, overlooking the Eastern and Southern light-areas of the Great Hall below, has been here restored. It also breasted a small North-Eastern wing of the Hall looking from it Southwards over the Eastern light-court.

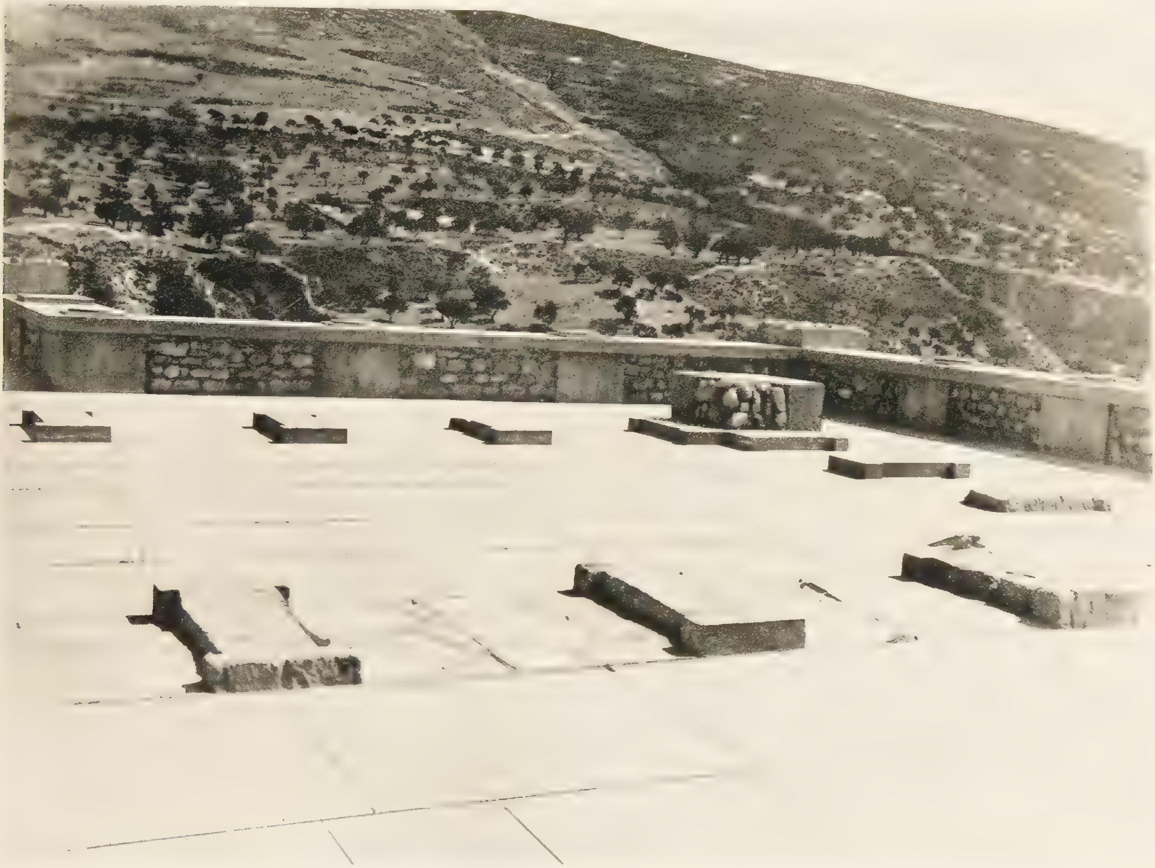

FIG. 190. CENTRAL AND EASTERN SECTIONS OF 'UPPER HALL OF DOUBLE AXES'.

System of Light-wells.

Did it, as now, command the admirable view that opens from its terrace

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[1] See, too, the general bird's-eye view, p. 285, Fig. 188, above.

Vista from within limited.

up the Valley of the Kaeratos? The verdant lower terraces where clumps of wild date palms may still be discerned—the rocky bluffs above, honeycombed by Minoan as well as by Greek and Roman tombs, the ravine beyond spanned by the graceful Venetian aqueduct—could the ancient equivalent of this fine panorama have here reached the eyes of the Palace dwellers?

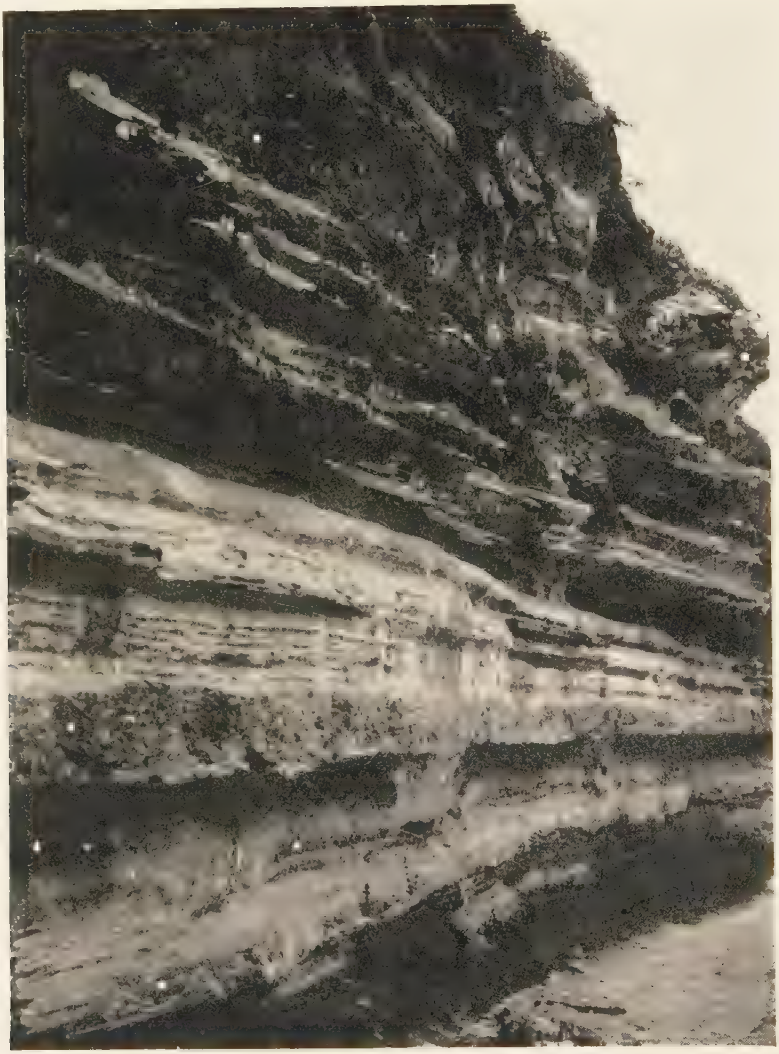

FIG. 191. CLIFF IN GORGE OF ST. IRÊNÊ (NEAR QUARRIES) SHOWING WIND EROSION.

The recently discovered East Portico, described above, may certainly to a great extent have commanded a considerable expanse to the East, but it seems highly improbable that anything except the higher parts of the hills was visible from the interior of the Upper Hall. It is quite possible, moreover, that the lighting of it, and, indeed, of the Upper Queen's Megaron may have been by means of window openings rather than by columnar parapets.

The walls that bordered the light-areas below would not have performed their most important protective function, namely, that of barring the fierce onslaught of the *Notia* or South-East wind, had they not risen far enough at least above the floor-level of the Upper Hall to break its force.

Light-Courts necessary protection against S.E. and N.W. winds.

The torrent force of this Southern blast pours periodically down the gorge beyond the Venetian Aqueduct above with a concentrated violence exceeding that of the habitual North winds. Its unrelenting fury, continued for days at a time almost without a pause, has left its mark indeed on the rocks themselves. The gritty limestone bluffs are cut, as with a razor, into a series of deep slits with narrow intervening ledges, some idea of the effect of which may be gathered from the photographic view given in Fig. 191 of a cliff near Hagia Irênê in the gorge just above the Aqueduct and near the great underground quarries that supplied the Palace blocks.

Wind erosion of rocks due to S.E. blast: slits cut in cliffs and Palace wall.

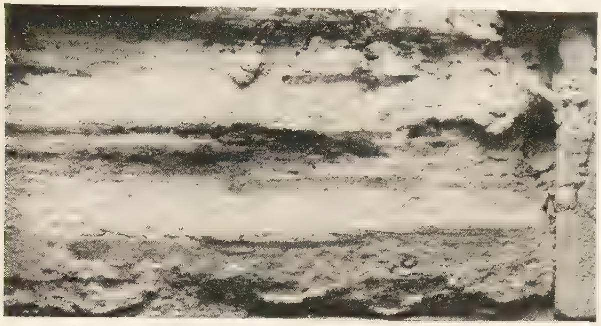
FIG. 192. LIMESTONE BLOCKS IN EAST LIGHT-WELL OF 'QUEEN'S MEGARON' SHOWING WIND EROSION.

An interesting illustration of this wind denudation on the blocks themselves, identical with that seen on the cliffs of Hagia Irênê, is supplied by a part of the North wall of the Eastern light-area of the 'Queen's Megaron' shown in Fig. 192. Owing to the ruin of the enclosing walls that originally sheltered the fabric on that side, the blocks here set on the edge of the slope seem to have been exposed for a considerable period to the full force of the South Wind. Their material is the same gritty limestone.

The deep cuttings in the rock face illustrated above, as well as the incisions on the walls themselves, may compare on a smaller scale with the erosion, produced by the same natural force, which the explorations of Sir Aurel Stein have made so well known to us on the Steppes of Central Asia. There, indeed, not only have great breaches been cut in the walls, but whole cities have been razed.

When it is remembered that this wind sweeps over the site with local dust clouds added to its lurid haze of Sahara sands, and that the alternative prevailing currents from the North-West are excessively chilly throughout the winter months, the general adoption of the light-well system with its little Courts and high surrounding walls is readily understood. Nowhere was it more necessary than in the windy gap of the Island in which Knossos lies. Shelter was more important than the most entrancing view.

Upper-story system above Great Halls.

A doorway on the South side of the first Section of the 'Upper Hall of the Double Axes' gave direct access to the second and third flights of the private staircase leading up from the 'Queen's Megaron', which had been preserved, together with its stair-block beyond, showing the marks of the first two steps of its fourth flight. Opposite this door, in the North wall of this large upper-chamber, was another, now restored on the analogy of that below it (see Fig. 189), opening on the main gangway known as the 'Upper East-West Corridor',[1] so that both private and public access were here secured.

Fragment of L. M. II fresco *in situ* on wall.

About three metres East of this doorway, sunken about half a metre beneath its original level owing to the subsidence due to the carbonization of underlying timber-work, a painted plaster fragment was found still attached to the wall revealing the character of its decoration in the last Age of the Palace (L. M. II).[2] Its fuller description may be therefore referred to the concluding Volume of the work, but it may be here mentioned that it depicted the fore-foot of a bull set on a ground with upstanding shoots of vegetation, parallel in style with the contemporary remains of analogous subjects found in the West Porch and the Ante-chamber of the 'Room of the Throne'. Beneath the floor-level of the adjoining East-West Corridor, stucco fragments of plants and spiraliform sprays in the same style also came to light, pointing to a general redecoration of the walls on this floor in that Period.

Decorative frieze associated with 'Upper Hall of Double Axes'.

Contemporary with spiral friezes of this area.

Some painted stucco fragments of exceptional brilliance that were found beneath the surface layer in the East light-well of the 'Hall of Double Axes' outside the portico line, and in a position indicative of their having fallen from above, may be taken to illustrate the style of decoration carried out in the Upper Chamber in the earlier era of restoration that corresponds with the closing phase of L. M. I *a*. A group of these, as restored in Fig. 193, shows part of a band with 'barred' borders containing double lines of connected spirals, with side sprays and central foliations, adapted from a papyrus motive such as that illustrated below in relation to the 'Queen's Megaron',[3] in that case in low relief. It bears a close analogy to a spiraliform pattern, in which the papyrus element is also clear, found in the fresco heap on the N.W. Palace border.[4] These examples—notably the last variety with rosettes within the spirals—fit on to the simpler design of spiral bands that runs through a large part of this quarter—including as we shall see the staircase loggia and the halls and bath-room below. The imitative version, indeed, seen in the 'Shield Fresco' at Tiryns where the spiraliform band connected with the shields shows a barred border,[1] like Fig. 193, completes the parallel, and it is clear that we have to do with a uniform system of decoration carried out throughout the Domestic Quarter at this epoch—the epoch, it will be remembered, to which belonged the later East staircase, the deposit beneath which contained such a mass of L. M. I *a* pottery.

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[1] As elsewhere noted, there was another 'Uppermost' E.-W. Corridor above this.

[2] It is seen in position in the sketch of the original remains of the 'Hall of the Double Axes' on that side, Fig. 225, p. 339, below.

[3] See below, p. 372, Fig. 247.

[4] See Theodore Fyfe, *Painted Plaster Decoration at Knossos, with special reference to the Architectural Schemes* (*R. I. B. A. Journ.*, 1902), p. 125, Fig. 62.

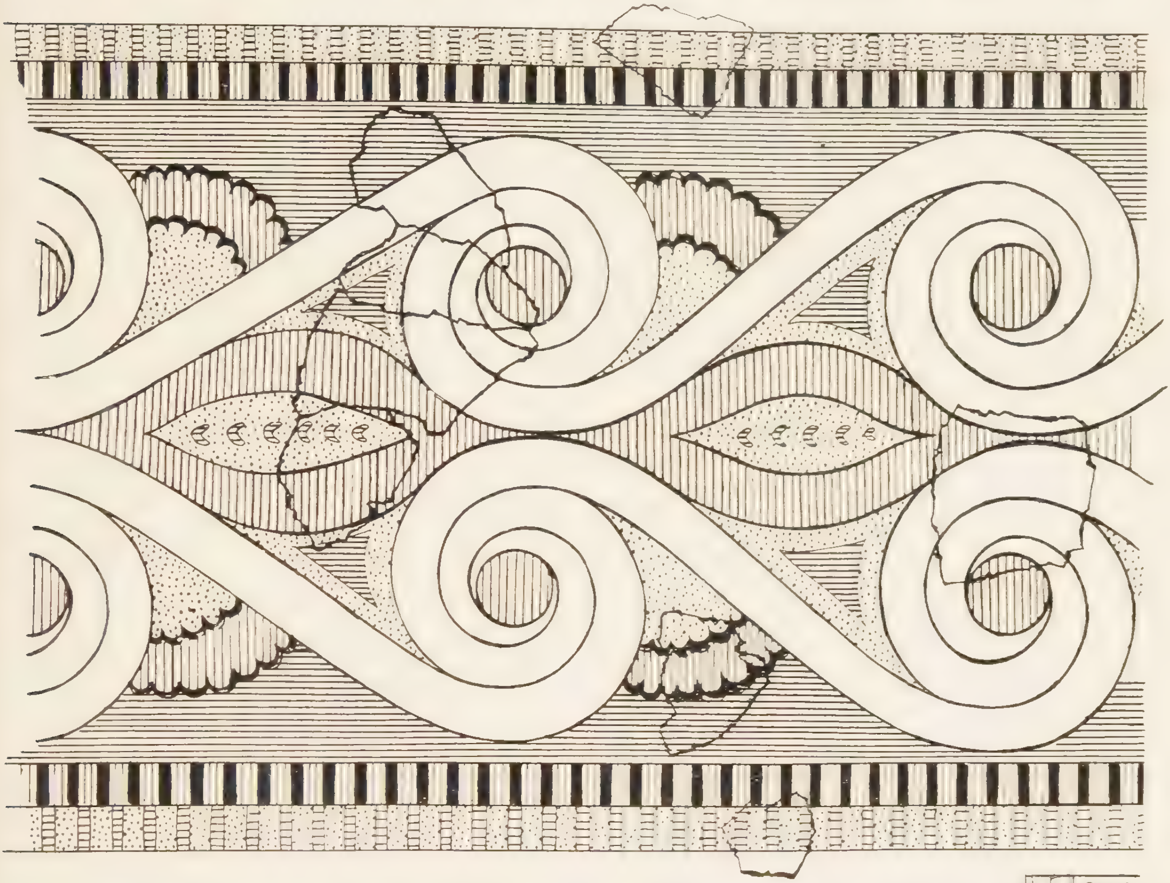

FIG. 193. RESTORED SECTION OF PAINTED STUCCO FRIEZE FROM EAST LIGHT-WELL, BELIEVED TO HAVE BEEN DERIVED FROM THE 'UPPER HALL OF THE DOUBLE AXES'. (SCALE = $\frac{1}{2}$.)

▥ BLUE
▤ RED
░ YELLOW

The Western end of this upper Hall overlooked the smaller light-well

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[1] See below, p. 304, Fig. 197, and G. Rodenwaldt, *Tiryns*, ii, Pl. V.

West light-well of upper and lower Hall. Facilities for social inter-communication.

of the 'Hall of the Double Axes' by a balustrade, restored, as shown in Fig. 189, immediately overlying the architrave above its bi-columnar front on that side. By this arrangement the upper floor was brought into relation with the open space below, which—lying in shadow from the early afternoon onwards—may well have been a favourite place of open-air resort for the lords of Knossos. In this way, but on a larger scale, the upper and lower chambers were socially linked together as in the case, already noted, of the balcony of the upper Megaron of the 'Royal Villa', which overlooked the narrow light-area, including the niche with the seat of honour belonging to the principal room below. As there, conversations could thus be conveniently held between one floor and the other; music played above or below could be heard at either level, and entertainments and sports—such as boxing or wrestling bouts—held in the Courts were enjoyed in common.

A strong suspicion must exist that this upper Hall, with its private stairs leading to the 'Queen's Megaron' below—itself, as will be shown, of feminine association[1]—was a large, semi-public withdrawing room largely devoted to women's use. It would have been thus a necessary complement to the Hall below, the prevailing male character of which, as we have seen, asserted itself in the suspended shields.[2]

Partial segregation of sexes.

There are many reasons for believing that harem life in the Oriental sense was unknown to the Minoans, but though, as we see from the groups of women among the men who crowd the front enclosure of the Grand Stands of the Miniature Frescoes,[3] the intermixing of the sexes was to a certain extent customary, we find the ladies entitled to the honorary seclusion of front seats. There was thus a partial and regulated segregation of the two sexes.

Private chamber of 'Thalamos' above 'Queen's Megaron'.

As in the case of the doorways of the 'Hall of the Double Axes' below, it was possible at any time, by shutting the doors, entirely to isolate the Central section of this upper Hall. On the other hand, the landing of the private staircase referred to gave access to a still more secluded suite of rooms, repeating the arrangement of the 'Queen's Megaron' and adjoining system below. The 'Upper Queen's Megaron' or 'Thalamos', as shown in the plan, Fig. 266, below, overlooked the Eastern light-well of the lower Hall by a columnar balustrade like that of the larger Upper Hall, affording the same facilities of intercourse as in the other case. It also communicated behind with a room arranged like that below, and which may therefore have been an upper bath-room. As already shown,[1] the back region that has been identified with this specially private Quarter,—approached on this floor by a Corridor answering to that below and named from the painted pithos at its entrance,—afforded various intimate conveniences, including two latrines with shafts leading to the great stone-built drains below. Here were some small chambers which have been recognized as bedrooms, and a windowless chamber, built over another closed room of the same kind, which from the clay sealings found within and beneath this area, we have every reason to regard as having been later used as a depository of Archives.

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[1] This, as noted below, p. 368, is marked in a special way by the proportionally lower benches.

[2] See p. 343 seqq. and Coloured Plate XXIV.

[3] See above, p. 46 seqq. and Coloured Plates XVI, XVII.

Windowless chamber for Treasury and Archives.

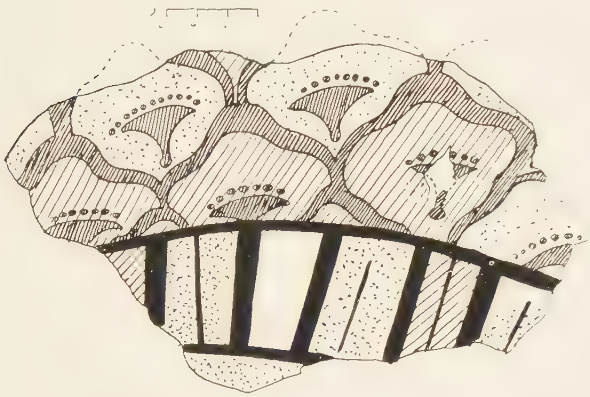

FIG. 194. FRESCO FRAGMENT SHOWING LOWER PART OF ROBE OF PROCESSIONAL FIGURE OF 'CUP-BEARER' CLASS.

The artistic relics connected with this chamber in its earlier capacity as a Treasury are described below in the Section relating to the Deposit of Ivories. From the character of some of the objects, including fragments of Miniature Frescoes with references to the Double Axe cult, a high probability arises that the Treasury that here existed stood in relation to some small neighbouring shrine of the tutelary Goddess.

Connected with Shrine of the Double Axe cult.

'Room of Stone Bench.'

Of this more private group of structures, the most important living-room seems to have been that which overlooked on its South side the little private Court known, from the engraved signs on its blocks, as the 'Court of the Distaffs'.[2] This room, owing to a stone bench having been found in position against its West wall, has been called the 'Room of the Stone Bench', and an illustration has been already given of it as first excavated, with the collapsed remains of the pavement in part reconstituted.[3]

Fragments of Processional Fresco.

Above the floor-level, near the doorway of this room, was found a piece of painted plaster, which from its curving striped border (in black, white, and blue) seems to have belonged to the loin-cloth of a figure similar to the youths of the 'Procession Fresco' (Fig. 194).[4] Like several of these, too, it shows a reticulated pattern above the border, in this case enclosing conventional flowers, like it, of a deep red colour, with alternating blue and yellow ground. Immediately outside the adjoining wall on the North side, overlooking the little Court, was also found part of the leg of a male figure, possibly belonging to the same design. It would thus appear that this chamber, and perhaps part of the border region, was adorned with processional subjects resembling those that play so large a part in the entrance system of the West wing of the Palace. Reasons have been already given for attributing this scheme of fresco decoration to an epoch of partial restoration that coincides with the mature L. M. I *a* phase,[1] and the parallel evidence here supplied from the Domestic Quarter, where we possess valid data for such a restoration at that epoch, goes far to confirm this conclusion.

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[1] *P. of M.*, i, pp. 228-30.

[2] See *ibid.*, i, p. 334, Fig. 243.

[3] *Ibid.*, i, p. 336, Fig. 244.

[4] From Fyfe, *Painted Plaster Decoration of Knossos, &c.*, p. 128, Fig. 69. (The position is there reversed.)

Belong to partial restoration towards close of L. M. I *a*.

'Service Staircase.'

Bordering the adjoining corridor and bay was the 'Service Staircase', originally a woodwork construction, the third flight of which has now been restored above its lower stair-block, still preserved, to its third landing. Here was certainly a second window immediately above that which still opens on its lower flight and landing and, like this, gaining its light from the well of the Grand Staircase.

Compact planning of inner region.

The whole arrangement, both above and below, of this region of the Domestic Quarter—centring round the upper and lower 'Treasuries' with their blind walls—is singularly compact, and, though in certain respects a modification of the original scheme is clearly traceable, the final result must be regarded as a triumph of skilful architectural planning. It passes comprehension, indeed, that the highly practical laying out of this inner region, fitted together with consummate skill into a single block—drained, ventilated, and lighted in a scientific fashion—should be looked on as fulfilling the idea of a maze, with its blind alleys and the inconsequent meanderings of a Labyrinth!

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[1] *P. of M.*, ii, Pt. II, p. 736.

§ 82. GRAND STAIRCASE AND LOGGIA AS FURTHER RESTORED; 'SHIELD FRESCO' AND ITS DERIVATIVES—MILITARY AND RELIGIOUS IMPORT.

Further reconstitution of Grand Staircase—to fifth flight; Impressive effect: a vision of the Past; 'Loggia of the Shield Fresco'; Fresco fragments thrown into nook below; 'Shield Fresco' replaced in replica; Comparison with Tiryns frieze—malachite green pigment in latter, of Egyptian derivation; Tiryns shield frieze copied from Knossian fresco; The great body-shields of Staircase loggias represent actual shields as hung in hall below; Shield decoration answers to military spirit that marks last Age of Palace; Indications of new Dynasty—introduction of Linear Script B; The 'Chariot Tablets'; Remains of smaller Shield Fresco; Influence of Shield Frescoes on Ceramic design; L. M. I a *polychrome Goblet; Shields and Spirals on 'Palace Style' Amphora; Shields on L. M. I* b *'aryballos', Phylakopi; Imported vessels with Shield designs at Gezer and Late Minoan sword; Reflection of Shield friezes on seal-types:* 8-*shaped shield as religious emblem; 'Baetylic' function—comparison with* ancilia; *Shields as decorative adjuncts; Amuletic beads in shield form; Minoan shield in field of signet gems as religious indication; Associated with Minotaur; Parade of Shields on Stairs suggestive both of temporal power and of divine protection.*

Further reconstruction of Grand Staircase.

SOMETHING has already been related of the heroic measures—including the harnessing to it of sixty men—to which it was necessary to have recourse in order to save the central core above of the Grand Staircase from imminent ruin.[1] In order to roof over and preserve the middle loggia of the stairs—so important from having been adorned by the 'Shield Fresco' described below—and at the same time to supply a better support for the uppermost elements of the Staircase itself, the back walls of the Western light-area of the 'Hall of the Double Axes' were considerably raised. As the result of the recent work of restoration, indeed, the Northern Section of this Court shows not only the window opening on what was known as the 'Upper East-West Corridor' but the lower part of one that, according to the original scheme, must have lighted a similar Corridor above.[2] (See view, Fig. 189, p. 290, above.)

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[1] *P. of M.*, i, p. 341.

[2] In order to harmonize with the fine isodomic masonry of the lower courses of the light-Court wall—those presenting the incised double axes—the facing blocks of the reconstructed part of the wall were each separately cast in cement, some powdered limestone being added to the superficial layer.

To fifth Flight.

Mr. Christian Doll's revised elevation of the Grand Staircase is reproduced in Plan D at the end of this Volume[1]: according to this the third and fourth flights were at a slightly less incline and, therefore, somewhat lower than the first two. The structure itself—which as actually reconstituted, conforms with the two lower flights—has been carried up to the fourth landing and the starting-point of a fifth flight, leading to the terrace level of the roof. The side blocks that supported the piers of the landing above have been raised again to their relative position, and two steps of the fifth flight which have left their marks on the left-hand block have been here restored in cement, together with part of the adjoining balustrade above the loggia with the 'Shield Fresco' (Fig. 195).

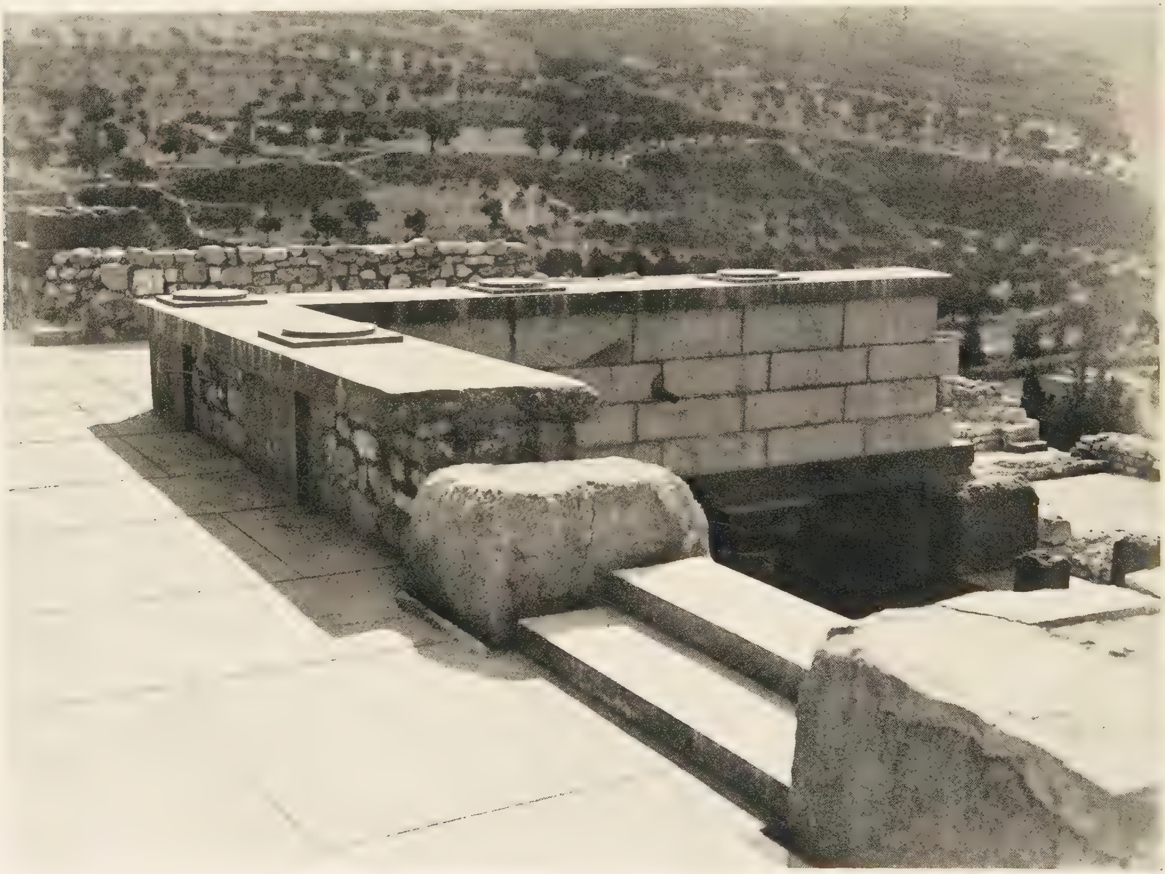

Fig. 195. Fourth Landing of Grand Staircase as reconstituted: the Two Side-blocks of Fifth Flight raised to their Original Position. Beyond is the Parapet of Upper Loggia, restored.

Of the fourth flight, immediately below these remains, we have not only similar records on the side blocks, but several of the gypsum steps have themselves been preserved. The flights below are practically complete, with the balustrades and the sockets for the supporting columns.

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[1] See, too, below, p. 482.

Impressive effect.

The Grand Staircase as thus re-compacted stands alone among ancient architectural remains. With its charred columns solidly restored in their pristine hues, surrounding in tiers its central well, its balustrades rising, practically intact, one above the other, with its imposing fresco of the great Minoan shields on the back walls of its middle gallery, now replaced in replica, and its still well-preserved gypsum steps ascending to four landings, it revives, as no other part of the building, the remote past. It was, indeed, my own lot to experience its strange power of imaginative suggestion, even at a time when the work of reconstitution had not attained its present completeness. During an attack of fever, having found, for the sake of better air,[1] a temporary lodging in the room below the inspection tower that has been erected on the neighbouring edge of the Central Court, and tempted in the warm moonlight to look down the staircase-well, the whole place seemed to awake awhile to life and movement. Such was the force of the illusion that the Priest-King with his plumed lily crown, great ladies, tightly girdled, flounced and corseted, long-stoled priests, and, after them, a retinue of elegant but sinewy youths—as if the Cup-bearer and his fellows had stepped down from the walls—passed and repassed on the flights below.

A vision of the past.

Loggia of the 'Shield Fresco'.

Loggia of the 'Shield Fresco'.

On the East side of the staircase well, level with the third landing, was a loggia of which the lower part of the front balustrade—similar to that of the staircase itself—was partially preserved above the entablature of the lower Colonnade.[2] A remarkable feature here came to light above the remains of the architrave of the lower Columns, in the shape of the carbonized ends of smaller round beams—somewhat sagging down—that had immediately supported the floor of the loggia. This was itself entered by a wide opening from the portico on the North side of the light-well, while a doorway in its Southern wall, the jambs of which were preserved in position, led to the interior part of the residential wing on that side.

At the time of the final catastrophe of the Palace, the back wall of the neighbouring Service Staircase at its second flight seems to have been

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[1] At the time of the first restoration of the staircase our head-quarters were still in the unhealthy Turkish house in the river valley below.

[2] See A. E., *Knossos*, *Report*, 1901 (*B.S.A.*, vii), p. 107. The parapet was found in a ruinous state and was removed to enable it to be re-supported. In the end it had to be largely restored.

Fresco fragments thrown into nook below.

ruined, and in this way a mass of debris had found its way into a small enclosed nook beyond it. From the discovery within it of some clay seal-impressions presenting Minoan Genii—derived no doubt from the neighbouring Upper Treasury—this narrow space was known, at the time of excavation, as the 'Area of the Demon Seals'. Its most important contents, however, were fragments of what were at once recognized to be a large architectonic fresco, including a band of spirals and rosettes. Although its full significance was not immediately realized, it was from the first evident that the only accessible place from which it could have been derived was the stately hall or Loggia above the East section of the 'Hall of the Colonnades'.[1]

'Shield Fresco' replaced in replica.

Unfortunately, not only had none of the painted stucco been left on the walls, but the sparse and jumbled fragments that had found their way into the small area below supplied no clue to the relative positions that they originally occupied. Many of the pieces, moreover, were extremely minute, and though the superposition of what were evidently parts of the centres of great 8-shaped shields on fragmentary sections of spiraliform bands supplied a key to the composition, its full restoration—of which Fig. 196 and the Coloured Plate XXIII will give the best idea—proved to be a long and difficult task.[2]

On the basis of this, Monsieur E. Gilliéron, fils, completed the design on stucco of four shields, of which there was evidence, linked together by the spiral and rosette band, to be replaced in their original position on the back wall of the Loggia. Part of the left border, which would have corresponded with the angle of the wall at its Northern end, had been preserved, and provided a secure starting-point. It was found that the restored composition fitted the wall section, to which *ex hypothesi* it had belonged, to an extraordinary degree of exactitude. The width of four shields—there was evidence of the existence of that number—together with a margin at the South end of the spiral band equal to that preserved at the North end, was 6·215 metres. On

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[1] A. E., *Knossos, Report*, 1901 (*B.S.A.*, vii), p. 108.

[2] Professor J. P. Droop, who kindly undertook for me the preliminary arrangement of the fragments, devoted a large part of a season's work to the task and achieved considerable results. A reconstitution made, however, in the Candia Museum in a plaster bed proved to be abortive, it being found that the larger size of the lower lobes of the shields had not been allowed for. Coloured tracings were then made of all the pieces, and these, mounted so that they could be separately placed, formed the basis of further long examination on behalf of Mr. E. J. Lambert the artist, Dr. Mackenzie, and myself. The restored drawing, executed by Mr. Lambert and embodying the results of these supplementary studies (see Coloured Plate XXIII), has been followed by Monsieur Gilliéron, fils, in his restoration of the fresco on the back wall of the Loggia.

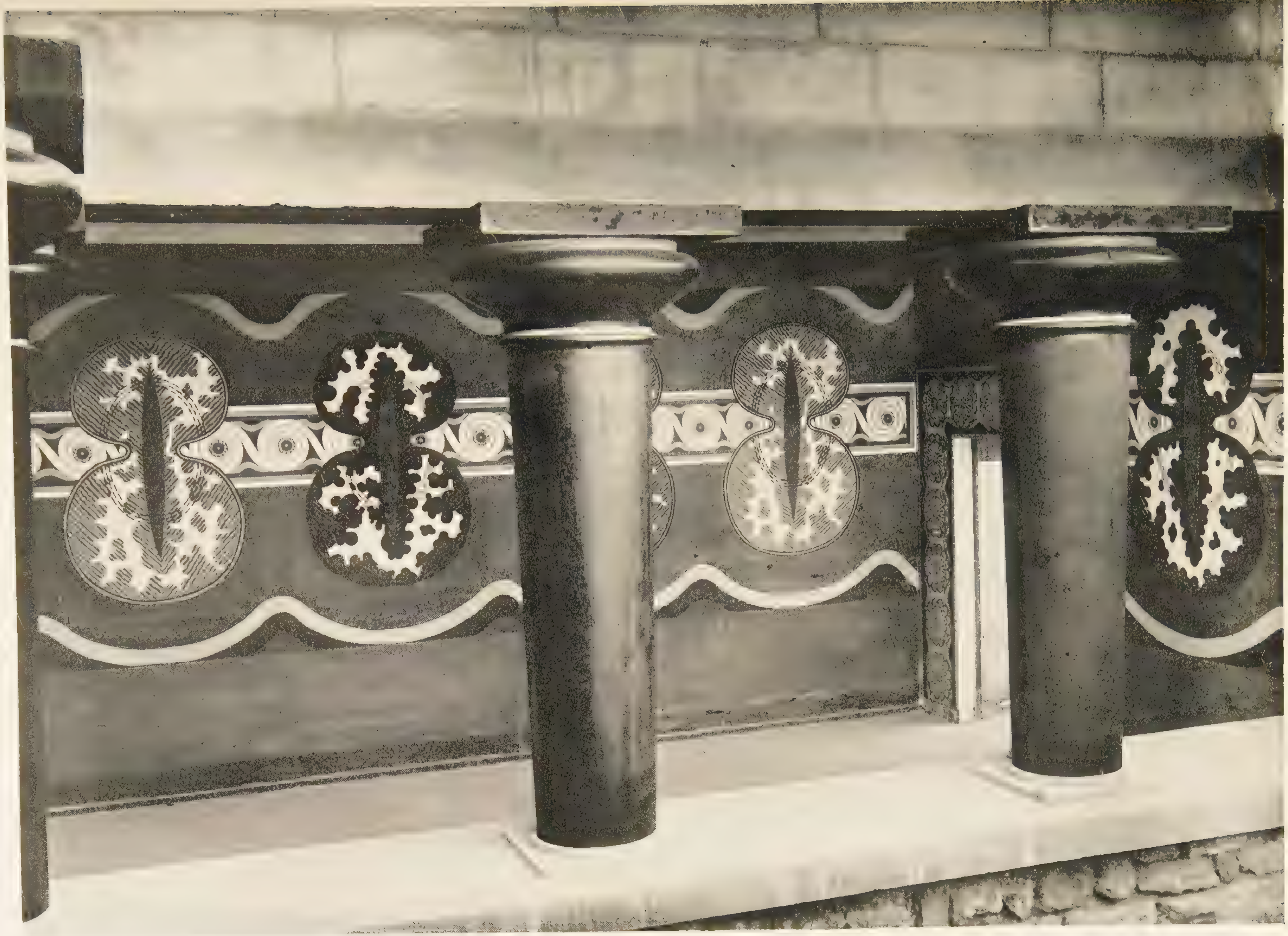

Fig. 196. Loggia opposite Grand Staircase as restored with Replica of 'Shield Fresco' on Walls.

the other hand, the width of the back wall of the Loggia itself, as fixed by the returning lines North and South, proved to be 6·220 metres—a difference of only 7 millimetres. Such a correspondence in measurements, reached quite independently, supplies a strong confirmation of the results arrived at.

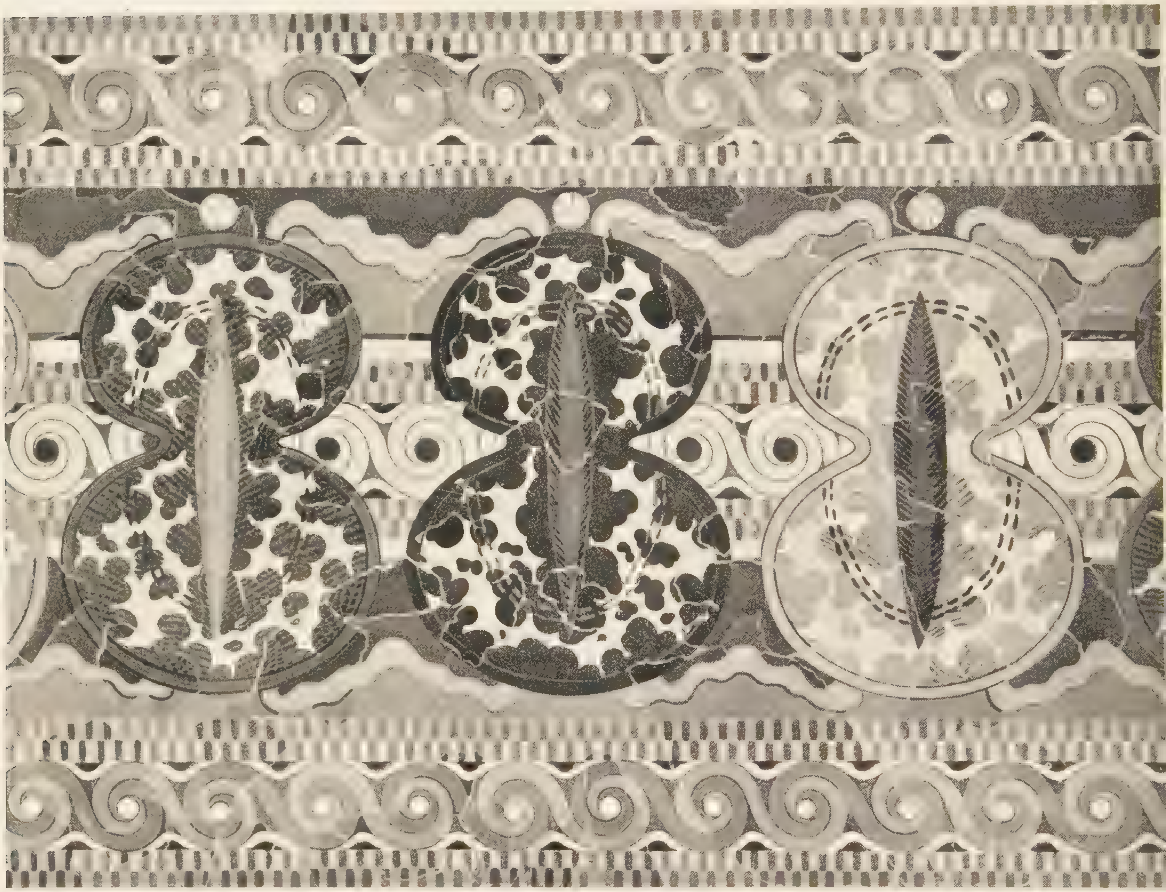

Fig. 197. Smaller Shield Fresco from Early Palace of Tiryns: as restored by Rodenwaldt.

Comparison with Tiryns frieze.

The field of the composition was orange, and, though there was not sufficient evidence on its decorative borders above and below, a simplified restoration has been given on the basis of the smaller shield fresco found in the Palace of Tiryns[1] (see Fig. 197). Professor Rodenwaldt, on the very imperfect evidence supplied by the Tiryns fragments before their reconstitution—which included part of the centre of one of the shields and of the rosette and spiral connected with it—had justly recognized the dependence of this fresco, belonging to the earlier Palace there on the work, in a 'larger and more monumental shape, with giant spiral bands', from the Knossian Palace.[1]

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[1] See the coloured reproduction in G. Rodenwaldt, *Tiryns*, ii, Pl. V and p. 34 seqq. Dr. Rodenwaldt, writing in 1912, remarks of the Tiryns frieze: 'Wir besitzen in diesen Fragmenten nicht nur das grösste und prächtigste sondern auch im Motiv interessanteste und coloristisch bedeutendste Ornament der kretisch-mykenischen Wandmalerei. Die Farben sind von unübertroffener Schönheit, die Ausführung von meisterhafter Sicherheit.'

As can be seen from the photographic reproduction in Fig. 197 the Tirynthian composition was altogether of a more decorative character. The total height of the space occupied by the bands above and below the shields is itself almost equivalent to that of the shields themselves, which do not stand apart as they do in the other case, as if suspended in the field, but are almost embedded in the closely packed series of brilliant and elaborate details. Ornament is the very essence of the design. Its whole height is only 64–5 cm., the shields being about 31–5 cm. in height—less than a fifth of those of the Knossian fresco.

Malachite green pigment at Tiryns, of Egyptian origin.

Professor Rodenwaldt rightly attaches importance to the fact that green appears among the colours of the upper and lower spiral bands in this composition.[2] He observes that it is generally unknown in Mainland Greece, and only used in Minoan Crete in the case of foliage, where, as at Knossos, yellow was mixed with blue. Admitting, as we seem bound to do, that the Tiryns composition was of somewhat later date, it is reasonable to ascribe this innovation to the influence of Egyptian wall-paintings and ceilings of the Late Eighteenth and Early Nineteenth Dynasty date, amongst which a similar pale green pigment was much used for decorative purposes.[3] It was, in fact, of very ancient tradition, going back to the prehistoric usage of pounded malachite, of which so many remains are found on the early slate palettes. The Tiryns specimens examined by Mr. Noel Heaton seem to be of this material.[4]

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[1] *Ibid.*, p. 36 seqq. The fragment mentioned is illustrated there, p. 37, Fig. 10.

[2] *Ibid.*, p. 35. As a further element of distinction, he observes (p. 38) that the 'alternating bar' motive—termed by him 'Zahnstreifen'—that accompanies the spirals is here depicted in darker and lighter tones of grey. But the fuller restoration of the Knossian fresco shows that these particular tints of grey characterize respectively two of the shield types.

[3] Among the ceilings illustrated in G. Jequier's *Décoration Égyptienne* belonging to the new Theban Empire, from about 1400 to 1000 B. C., the green appears *passim.*

[4] Heaton, in *Tiryns*, ii, p. 226. He observes in composition it appears to be carbonate of copper and probably therefore it was prepared by grinding the mineral malachite. No green pigment at all was used by the fresco painters of Knossos, a green colour being obtained when required by 'mixing blue and yellow'. The appearance of this colour on the Tiryns fresco seems to have been due to a special Egyptian influence on the Greek Mainland that makes itself observable during this period.

This is, in any case, a coloristic detail that solely concerns the ornamental accretions to the broad central band of the Tiryns fresco presenting the shields, which must be regarded as the original part of the design. Apart from certain minor variations, such as the substitution of red disks in place of the rosettes of the spirals, and their grey-barred borders, and the choice of ochreous red and grey for the elongated bosses of the shields,—orange in the Knossian version—the conformity both in the colour and detail of the main motive is complete to an extraordinary degree. For the spotted ox-hides that here too compose the fields of the shields, we have the same alternation of ochreous red, grey, black, and pale bluish grey that contributes such a harmonious effect to the noble composition on the Staircase Loggia (see Coloured Plate XXIII). Otherwise unique details appear in both cases, such as the red lines that mark the borders of the shields, the broken ovals, consisting of triple lines of red dashes[1] within them, that suggest the outline of the more prominent part of the surface, and the transverse black hatching that affects both the hides themselves and the elongated central bosses. This hatching may itself have been intended to suggest the shading of a rounded surface—a phenomenon repeated at a slightly later date on the lower part of the Griffin of the 'Room of the Throne'.[2] This is the first hint of an attempt to render *chiaroscuro* in Minoan Art.

Tiryns shields copied from Knossian fresco.

The Tirynthian example, being on a smaller scale and purely decorative in intention, was a more finished work, and the colouring more brilliant and varied. The shields and spiral frieze of the Knossian Loggia were rather executed for broad effect, and a certain roughness is traceable in the painting itself, and in the surface of the plaster. Some of this, however, may be due to the fact that the fresco had been a good deal damaged by fire, the effect of heat being specially visible in the deeper tone of the ochreous yellow, due to oxidization from this cause.

In any case it can hardly be doubted, in view not only of the fact that the subject of both frescoes is identical, but of the striking correspondences in details—involving to a high degree a similar artistic attitude to the subject—that the Tiryns Frieze was executed not long after the other by a Minoan craftsman who had owed his training to the Palace School of Knossos.[3]

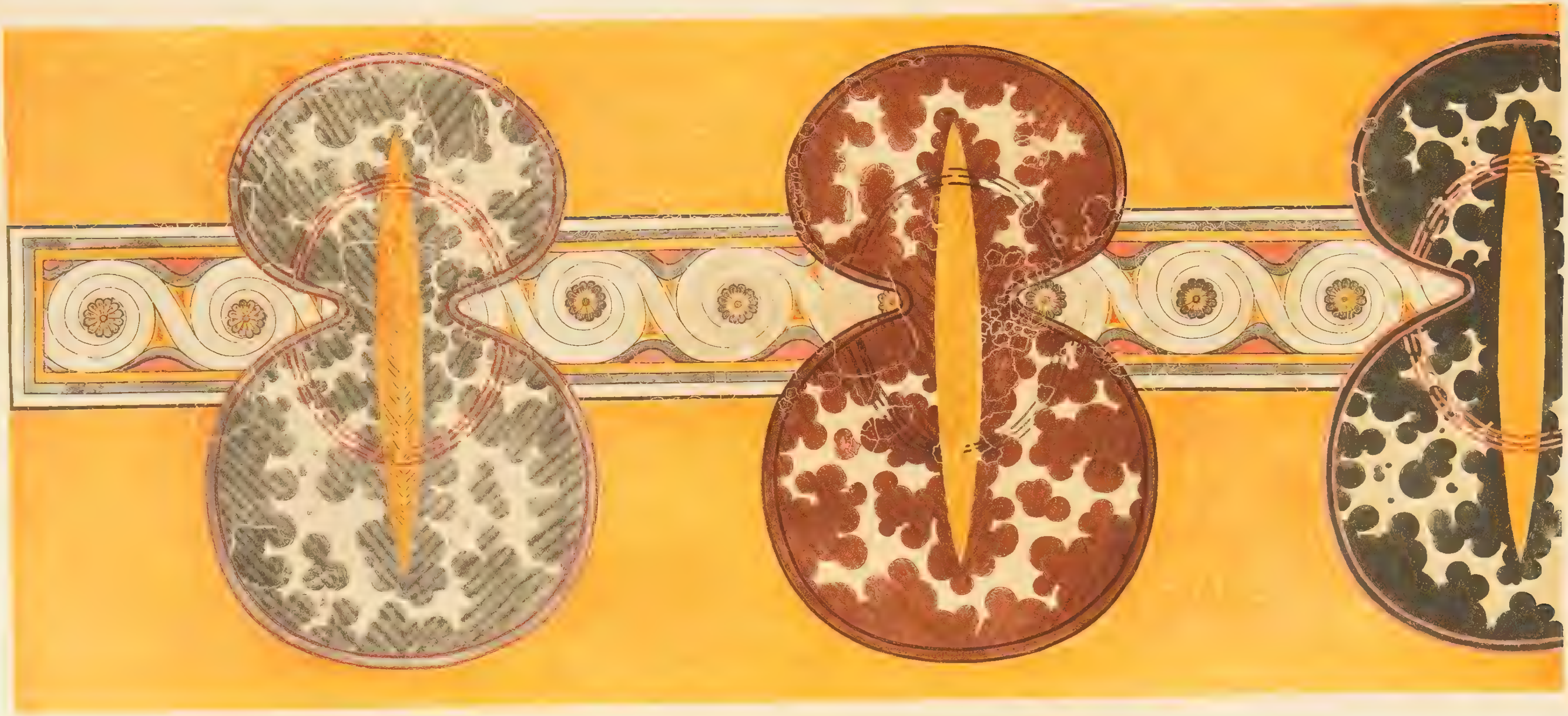
Cf., too, H. Frankfort, *The Affinities of the Mural Painting of El-'Amarneh* (E. E. F., 1929), p. 24.

[1] On the Tiryns shields there are only two rows of dashes.

[2] A. E., *Knossos*, *Report*, 1900, p. 40. *B. S. A.*, p. 40.

[3] Rodenwaldt, *op. cit.*, p. 38, observes: 'Zweifellos ist das Tirynther Ornament von dem wahrscheinlich älteren, sicher grösseren und vollständigeren Knossischen abhängig.' Writing, however, at a time before the reconstruction of the Knossian fresco, he inclined to the view that a Mainland painter might

PLATE XXIII



MIDDLE BAND OF 'SHIELD FRESCO' FROM LOGGIA OF GRAND STAIRCASE

The great body-shields of staircase loggia.

It is to Knossos, indeed, that we have to turn to understand the real signification of the design, which will be seen to go far beyond a merely artistic intention. The plastic suggestions discernible, such as the hatching and triple contours employed to convey the idea of relief, betray the painter's endeavour to break through the trammels of purely decorative Art. For the shields are real Minoan shields. They are 1·63 metres, or about 5 ft. 3½ in., in height,[1] almost exactly corresponding with the somewhat low stature of Minoan men, estimated at about 5 ft. 4 in., and thus fulfilling the epic description of ποδηνεκής.[2]

Represent actual shields as hung in Hall below.

Nor was it for nothing that these great shields were here depicted as suspended across the purely decorative spiral band. The complement, as we shall see, is to be found in the great Hall below, where remains of the spiral band existed immediately above the upper borders of the gypsum dadoes, but without any indication of the shields themselves. Nothing here can be more eloquent than this omission, which clearly points to the actual suspension of the originals across the band, in conformity with the Homeric usage of hanging up the shields in the warriors' hall.

Shield decoration answers to military spirit that marks last Age of Palace.

When it is borne in mind that this painted reproduction of suspended shields, as seen in this staircase 'loggia', was probably repeated on the back walls of two further 'loggias' of the kind that we must suppose to have faced the landings above, the stately effect of these rows of bucklers on those descending the stairs to the main reception hall can well be imagined. Supplemented, as we have reason to suppose it was, by the actual suspension of rows of these huge body-shields in the successive sections of the great Hall below, this martial parade could hardly have been without its special significance. This is the more evident when it is recalled that the sparse remains of earlier painted stucco decoration found in this area or its borders connect themselves rather with processional schemes,[3] or the sports of the bull-ring.[4] It is therefore of interest to recall the fact that the epoch to which, on stylistic and other grounds, the 'Shield Fresco' has been referred—the close, that is, of the earlier phase of L. M. I—corresponds with what can be clearly shown to have been a great reinforcement of Minoan influences on the Mainland and Aegean side, and even, it may

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have been enabled to copy it by means of 'pattern books' (Musterbücher). But there is an artistic conformity that goes beyond any such mechanical source.

[1] The breadth of the upper lobes was 0·93 metre, of the lower, 1·05 metres.

[2] Cf. *Il.* xv. 646.

[3] See above, p. 297.

[4] A part of the thigh of a figure in low relief bearing this character, found on the South border of the Hall of the Double Axes, is described below (see p. 330, Fig. 220). A fragment of a small relief of a bull was found East of the Hall.

seem, farther East. This is archaeologically marked by the great simultaneous intrusion on many sides of the Cretan ceramic style described above as L. M. I *b*, itself notable for the fantastic treatment of the 'Sacral Ivy' motive already evolved in the preceding Age.[1]

In Crete itself, outside Knossos, this was a period of widespread destruction. In the towns of the Eastern part of the Island, such as Palaikastro and Gournià, as at Phaestos itself, we find similar evidence of a sudden cutting short of a flourishing community. May not—we are tempted to ask—the overweening power to which the Lords of Knossos seem at this time to have attained, account for the overthrow of neighbour-cities, and perhaps further aggressive enterprises elsewhere?

The warlike parade inherent in the decorative designs introduced at this time in the residential quarter of the Knossian Palace may well be thought to stand in direct relation to a new and stirring chapter in Minoan history.

Indications of new dynasty: introduction of Linear Script B. The 'Chariot Tablets'.

At Knossos, as far as it is possible to judge, it seems to mark the advent of a new dynasty. It is to this epoch, indeed, as will be more fully shown elsewhere, that must be referred the introduction of the new system of linear script [B] which seems to imply a very distinct change in internal administration. Nor should we fail to recall that three large hoards of clay inventories in this writing, belonging to the closing period of the Palace, refer to war-chariots and horses and to the cuirasses of Minoan knights or their equivalent in metal ingots.[2]

Influence of the 'Shield Fresco' and Similar Painted Stucco Designs on Ceramic Art.

Remains of smaller shield fresco.

Considering the unity in style sought by the Minoan artists in all materials, and the constant reaction of fresco designs on the walls upon vase paintings, about which so much evidence has already been given, these magnificent arrays of shields in what was really the descending entrance passage to the chief halls of the residential quarter could not have been without their effect on minor works. Some fragments of painted stucco remains—unfortunately much burnt—showing parts of spiral bands and shields on a scale and model resembling those of Tiryns,[1] occurred in the miscellaneous deposit—swept out of the Palace at a late epoch—found on the North-West of the site in the 'North Threshing-floor Area'. On the ceramic Art of the latter part of L. M. I *a*, and notably on designs in the 'Palace Style' of the ensuing L. M. II Period, the influence of the great 'Shield Fresco' is very marked, and it can be traced farther afield, not only to Aegean sites, like Phylakopi in Melos, but to the Syrian coasts.

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[1] See on this, *P. of M.*, ii, Pt. II, p. 478 seqq.

[2] See A. E., *Minoan Weights and Currency*, p. 357 (in *Corolla Numismatica*, Oxford University Press, 1906): 'On a class of tablets on which a chariot and a horse's head are generally depicted, the figure of the cuirass had at times been erased and the ingot sign substituted. The royal charioteer was in these cases supplied with the equivalent in metal in place of the ready-made cuirass.' See, too, *Scripta Minoa*, i, p. 42, Fig. 19 (Deposit of Chariot Tablets).

Influence of 'Shield Fresco' on ceramic design.

The general endeavour of the vase painters to keep pace with those who executed frescoes on the Palace walls, and to follow the decorative models supplied by them, is in this case best illustrated by a remarkable group of painted clay vessels from the Fifth Chamber Tomb excavated at Isopata, North of Knossos.[2] These works, which come within the limits of L. M. I *a*, and must be regarded as practically contemporary with the 'Shield Fresco' of the 'Loggia', are doubly interesting since they show, as in some other cases, an actual attempt on the part of the ceramic artist to imitate both the technique and the actual colouring of the painted stucco models. Venetian red, kyanos blue, and black hues here appear on the terra-cotta ground, itself, it would appear, originally covered with a stucco wash (Fig. 198).

L. M. I *a* polychrome goblet.

These vessels, with their twin doubly coiled handles, recalled the three-handled alabaster vase from the Fourth Shaft Grave at Mycenae,[3] but the type of handle itself goes back at Knossos to the acme of the M. M. II ceramic style. The most important of these sepulchral vessels in the present connexion is the goblet, the two sides of which, reproduced in Fig. 198, *a*, *b*, have for their centre subjects an 8-shaped shield and a helmet, in each case superimposed on a triple spiral band. The shield and helmet are painted blue with black lines, the blue ground reappearing above and below this central field. As if, moreover, to complete the architectonic suggestion, a row of red disks appears beneath the projecting rim.[4]

The parallelism with the decoration of the Palace walls here visible is enhanced by the fact that, in the case of some contemporary examples of L. M. I *a* polychromy from the Little Palace of Hagia Triada, the colours were applied to a thin coating of plaster which, when analytically examined by Mr. Noel Heaton, proved to be of practically pure carbonate of lime, like that of the frescoes.[1]

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[1] Rodenwaldt, *op. cit.*, p. 37, notes their similarity.

[2] A. E., *Tomb of the Double Axes, &c.*, p. 25 seqq.: *Archaeologia*, lxv and Coloured Plate IV. The colour effect of these vessels is illustrated by one introduced in the left-hand corner of the Coloured Plate XXIII. Similar types of vessel as noted, *loc. cit.*, were found at Hagia Triada, where they belong to the latest phase of the Little Palace.

[3] Schliemann, *Mycenae*, p. 246, Fig. 256.

[4] The 'bar' ornament, noted in the case of the Tiryns Fresco, also recurs here. On the parallel type of vessel (Rodenwaldt, *op. cit.*, p. 25, Coloured Plate IV) alternating black and kyanos blue 'bars' are seen, recalling the lighter and darker blue-grey 'bars' of the Fresco.

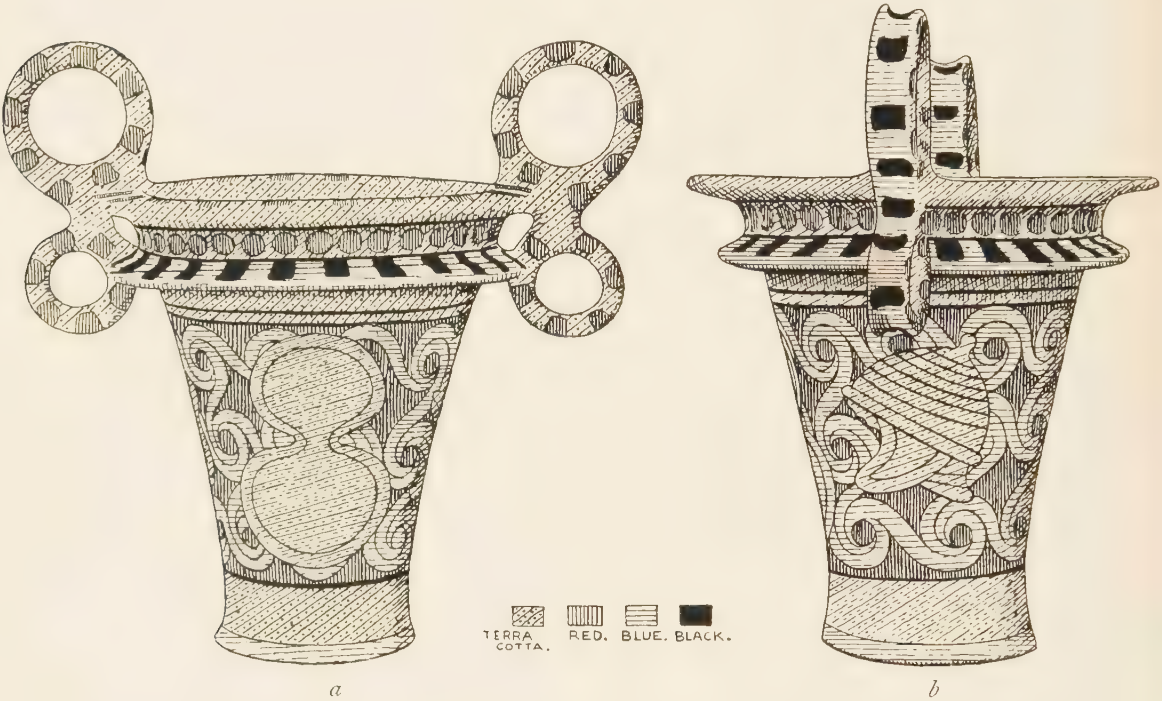

FIG. 198. POLYCHROME GOBLET OF SEPULCHRAL CLASS (L. M. I *a*) SHOWING 8-SHAPED SHIELD AND HELMET AGAINST SPIRAL BAND (TOMB OF DOUBLE AXES, KNOSSOS).

Shields and spirals on 'Palace Style' *amphora*.

Apart from these remarkable examples of Late Minoan polychrome ware, good reproductions of shield designs are supplied by the remains of a large *amphora* from the West front of the Palace. This fine vessel, now partly restored as shown in Fig. 199, may be attributed to the earliest phase of the 'Palace Style' that characterizes the last palatial Age of Knossos,[2] and can be approximately set down to about 1450 B. C.—over two generations later than the actual date when the fresco was executed. The shields here are rendered in a bright orange-brown glaze medium, and are involved in a complicated system of spirals and rosettes with reserved petals, the whole on a buff ground. One variety shows a decorative outgrowth of the spotted ox-hide, together with a representation of the painted central boss.

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[1] Mr. Noel Heaton, F.C.S., with Professor Halbherr's permission, tested fragments of the painted stucco coating of some chafing pans from Hagia Triada (*T. of Double Axes*, pp. 28, 29). A cup with two coiled handles exactly resembling the Isopata specimens was found with these chafing dishes, but the painted coating had disappeared. The evidence from the polychrome vases found in the Isopata Tomb is not so clear, though the *kyanos* blue and Venetian red correspond with that seen on the chafing pans of the Hagia Triada group. For similar pans from a Mavro Spelio Tomb see E. J. Forsdyke, *B. S. A.*, xxviii, p. 292.

[2] This class was first defined by me in *Knossos, Report*, 1901 (*B. S. A.*, vii, p. 51).

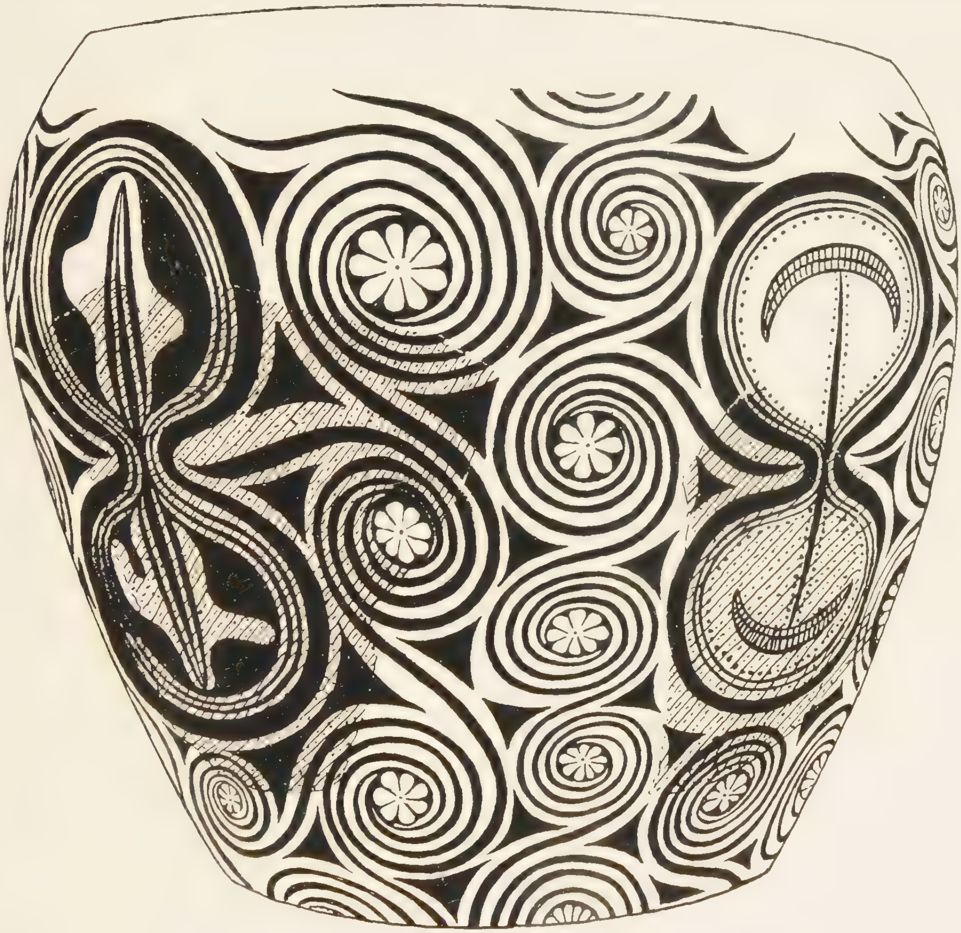

Fig. 199. Part of Large Amphora in 'Palace Style' showing Shields and Spirals with Rosettes. (From West Front of Palace, Knossos.)

Another shield-type depicted is that completed to the right of the fragment. It will be seen that in this case the ends of the boss contained within the two lobes of the shield run into an arched ornament, giving them, in each case, somewhat the appearance of an anchor. The origin of this canopy is of considerable interest, since it has been clearly due to the suggestion of the triple curves of dashes, which in the fresco design mark the outline of the more bulging part of the shield. It is a reminiscence, at second hand, of the plastic original, of the same kind as that already noted in Fig. 196.

But the impression produced by the magnificent display of the 'Shield

Shields on L. M. I *b* 'aryballoi' from Gezer and Phylakopi.

Frescoes', repeated in successive 'loggias' looking out on the 'Grand Staircase' at Knossos, has left its record far beyond the limits of Crete itself. In painted stucco, as we have already seen, it found its literal adaptation on a smaller scale in the Palace at Tiryns. In ceramic art we mark the repetition of the shield type on a series of sherds from more than one extraneous site belonging to the second half of the First Late Minoan Period. A good example is supplied by a fragment of an imported clay 'aryballos', of the broad low type usual at this epoch, found at Phylakopi in Melos[1] (Fig. 201) showing a 'Sacral Ivy' pattern beside it. The spots here are roughly shown, but the inner contours of the lobes of the shield betray an attempt to render its relief.

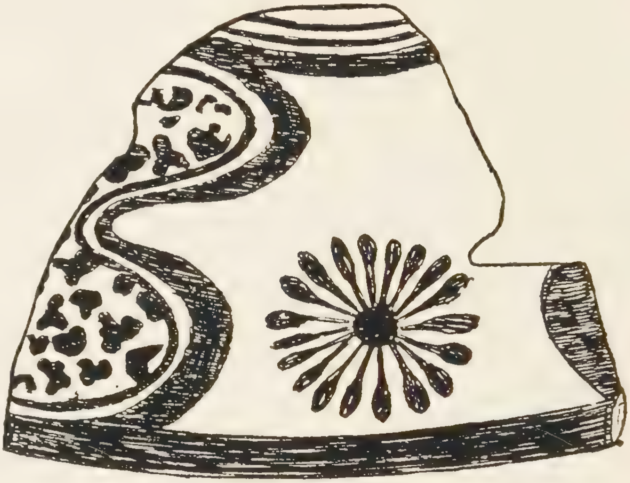

Fig. 200. Fragment of Imported L. M. I *b* 'Aryballos', Gezer, Palestine ($\frac{5}{6}$).

Imported vessels with shields and L. M. sword at Gezer.

Of still greater interest is the appearance of this shield type at Gezer in Palestine, in association with remains belonging to the 'Second Semite Period' there, on what was certainly part of a similar imported 'aryballos' (Fig. 200).[2] Other fragments of Minoan painted vases belonging to the L. M. I *b* style, of which a specimen is reproduced in Fig. 203,[3] were found on the same site, together with a still more suggestive object in the shape of the upper half of a bronze 'horned' sword of

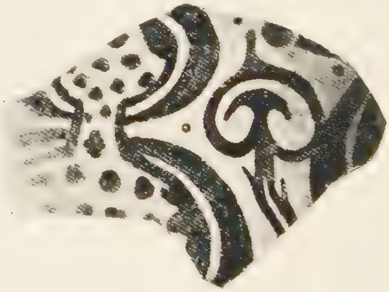

Fig. 201. Fragment of 'Aryballos', L. M. I *b*, Phylakopi.

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[1] *Phylakopi*, Pl. XXXI, 5. This fragment belongs to a fairly advanced stage of the L. M. I *b* Class and the spray at the side, proceeding apparently from a spiral coil, is akin to the 'Sacral Ivy' described in *P. of M.*, ii, Pt. II, p. 478 seqq.

[2] From R. A. Stewart Macalister, *The Excavation of Gezer* (1902–9), vol. ii, p. 155, Fig. 318. The fragment is there attributed to L. M. II.

[3] *Op. cit.*, vol. iii, Pl. CLI, 12. Cf. Knossos, *P. of M.*, ii, Pt. II, p. 492, Fig. 297, *a*; Kakovatos, *ibid.*, p. 485, Fig. 291, *b*.

a characteristic Minoan type[1] (Fig. 202) represented among the earlier specimens of this class of weapon from the Zafer Papoura cemetery at Knossos.

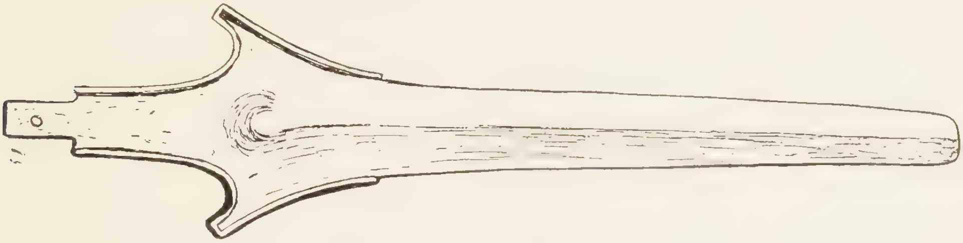

Fig. 202. Part of Bronze 'Horned' Sword (L. M. I) from Gezer, Palestine.

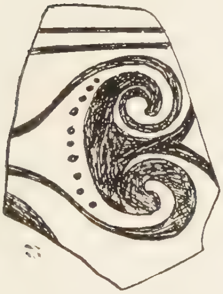

Fig. 203. L. M. I *b* Sherd, Gezer, Palestine.

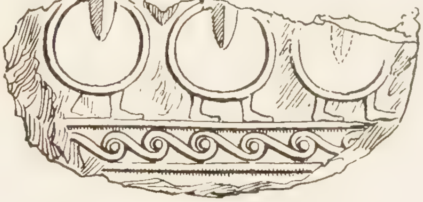

Fig. 204. Clay Seal-impression showing Lower Part of Three Warriors with Body-shields above Spiral Frieze.

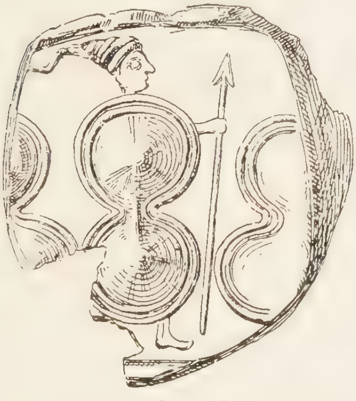

Fig. 205. Clay Seal-impression showing Three Warriors with 8-shaped Body-shields.

Reflection of shield friezes in seal-types.

The combination of a succession of Minoan 8-shaped shields with a decorative band of spirals and rosettes, of which we have such a fine example in the polychrome cup and the 'Palace Style' amphora illustrated in Fig. 199, above, affords the surest proof that the shields on the painted vases were in fact a reflection of some such imposing prototypes on the Palace walls as we see in the 'Shield Fresco' of the staircase loggia. A clay seal-impression, unfortunately much broken, derived from the 'Treasury' of the Domestic Quarter, afforded the same evidence of this architectonic origin—a row of three shields of this form being there connected, as in the fresco, by a spiral band. The same material, moreover, supplies an indication of the existence of a parallel group of frescoes presenting rows of the warriors themselves holding the great body-shields at their sides. The clay impression (Fig. 204),[2] found beneath the landing of the

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[1] Macalister, *op. cit.*, ii, Pl. LXXV, 13. Its length without the point is 26·5 cm.

[2] See, too, *P. of M.*, i, p. 694, Fig. 516.

'Stepped Porch' in the West Quarter of the Palace, though only the lower half of it is preserved, is of special interest because it points to the original design of the marching warriors having been set above the spiral frieze, whereas, in the case of the 'Shield Fresco' the shields themselves were, as it were, hung across it. On another clay sealing from the 'Treasury' referred to, the greater part of one of the warriors is preserved holding a spear, and with a peaked and crested helmet on his head (Fig. 205).[1]

Religious Aspect of the Minoan Shield.

8-shaped shield as religious emblem.

Of the 8-shaped shield as a religious emblem in Minoan Art we have already seen an example on the 'Votive pinax' from Mycenae, where the shield is held by a divinity whose female sex is shown by the white limbs.[2] A similar descending figure appears, too, in a reserved field above, on the gold signet-ring from Mycenae, depicting the seated Goddess. A parallel with the later Palladium[3] has been, not unnaturally, drawn from these figures, and the traditional relation of Athena with the Libyan Goddess Neith, as worshipped by the Auseans,[4] dwelling about Lake Tritonis, has suggested another interesting correspondence.[5]

'Baetylic' function.

For, as has been already observed,[6] the 8-shaped shield already appears—together with her chisel-edged arrows—as the badge of Neith on the earliest dynastic monuments of Egypt. So, too, in certain representations of a religious class on signet-rings, the Minoan shield of this class seems to perform a baetylic function as a vehicle of divine possession. In two cases female figures are seen prone on such shields as if in an ecstatic trance.[7]

Comparison with *ancilia*.

The Roman *ancilia*, in which we may recognize a religious survival of the Minoan shields[8] wholly translated into metal (compare Fig. 206, *a* and *b*),[9] were endued with divine powers of movement, and gave forth a warning clangour.[1] In certain respects we may find an anthropological equivalent for them in the Burmese gongs—themselves essentially round bronze shields with a central boss—the sounding of which serves to summon the divinity to answer the prayers of his worshippers. With the Minoans the sacred shield—whether or not it was actually beaten—was clearly used as a means of spiritual possession. The scenes such as that on the Vapheio ring, in which the votary appears in a state of ecstatic trance, prone on the body-shield, recalls an illustration in Johann Scheffer's account of the still heathen Lapps,[2] where the Shamanistic soothsayer, after long chanting, accompanied by the pulsation of his troll-drum, has fallen in the same ecstatic state of possession, face downwards on the ground 'swooning and like a dead man', with the instrument over the back of his head and shoulders.

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[1] A. E., *Knossos, Report*, 1902, p. 77, Fig. 41 (*B. S. A.*, viii). On a clay seal-impression from Hagia Triada two warriors appear with similar shields (Doro Levi, *Cretule di Hagia Triada, &c.; Annuario, &c.*, vii, 1929, p. 58, Fig. 132). The design is summarily executed, like rough Etruscan work. Cf. too Forsdyke, *Mavro Spelio* (*B. S. A.*, xxviii), Pl. XIX, vii, B. 5.

[2] See above, p. 135, and Fig. 88.

[3] E. Gardner, *Palladia from Mycenae* (*J. H. S.*, xiii, 1893), p. 21 seqq.

[4] Herodotus ii. 28, 59, 83, 169, 170, 175. On the identification of the Ausean Goddess with Neith see, especially, Oric Bates, *The Eastern Libyans*, p. 203 seqq.

[5] See *P. of M.*, i, p. 50 seqq.

[6] See especially P. Newberry, *Proc. Soc. Bibl. Arch.*, 1906, pp. 72, 73, who compares the shield on the tablet of Aha (Mena) with the Minoan. For the stela of King Mer-Neith where the shield of Neith also recurs, see Petrie, *R. Tombs of First Dyn.*, I, frontispiece.

[7] See above, pp. 140, 141, and Fig. 91.

[8] See *P. of M.*, ii, Pt. I, pp. 52, 53, and A. E., *Myc. Tree and Pillar Cult*, p. 82, &c. (*J. H. S.*, xxi, p. 180, &c.).

[9] This representation is taken from a *de-*

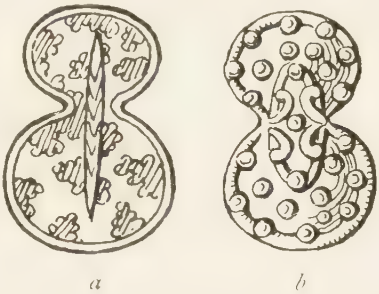

FIG. 206. *a*, MINOAN 8-SHAPED BODY-SHIELD SHOWING ELONGATED BOSS, AND SPOTS OF OX-HIDE; *b*, *ANCILE* WITH BOSS, AND SPOTS REMINISCENT OF THE HIDE.

Shields as decorative adjuncts.

A widespread decorative application of the Minoan shields appears at this time in the shape of attachments or prominences on the circumference of alabaster and metal vases or other utensils.[3]

Amuletic beads in shield form.

The appearance of beads in the form of this Minoan shield type, already before the close of the Early Minoan Age,[4] as well as on pictographic bead-seals of that date,[5] may point to an early use of this symbol as an amulet. A beautiful specimen of a similar bead, which, from its associations, probably belongs to the closing M. M. III phase, was found a little beneath the later floor on the East border of the 'School Room'. It is of lapis lazuli, with a perforated prominence behind for attachment, and the face of the shield is decorated with looped spirals (Fig. 207).

On Minoan intaglios, especially those representing animals such as lions, bulls, and wild goats, shields of this form are also frequently inserted in the field. In some cases, moreover, it seems to stand in a sacral relation to

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narius of P. Licinius Stolo (12 B.C.), Grueber, *Cat. of Roman Coins in British Museum*, ii, p. 80 and 111, Pl. LXVIII, 9.

[1] Liv. *Epit.* lxviii.

[2] *Lapponia* (Frankfort, 1673), pp. 138, 139.

[3] A. E., *The Prehistoric Tombs of Knossos*, i, p. 44, Fig. 41 (*Archaeologia*, lix), and cf. above, p. 91, Fig 50 (silver 'rhyton').

[4] *P. of M.*, ii, Pt. I, p. 52, Fig. 25, *b*.

[5] *Ibid.*, Fig. 25, *a*.

Minoan shield in field of signet gems as religious indication.

the subject. On the clay sealing (Fig. 208) from the 'Corridor of the Bays', the shield is placed beside a column with a spirally engraved shaft, which doubtless belonged to the baetylic class. An 'agrimi' standing in front of it here supplies a sacrificial touch: in the closely parallel design (Fig. 209), on a sealing from the 'Room of the Archives', it is attached to the spiral column by a rope. We also see the Minoan shield in connexion with the bull-grappling sports, over which the Minoan Goddess is known to have presided. On a fragmentary clay sealing from the 'Little Palace', depicting part of a scene of the *taurokathapsia*, it appears in front of the bull in company with a sacral knot, the latter a usual symbol of the religious connexion of such performances.[1] In a fine figure of a driven bull on a jasper bead-seal from Rethymnos the shield-symbol is inserted beneath the animal (Fig. 210). In a similar episode it is also associated with the 'impaled triangle', another symbol of sacral import (Fig. 211).

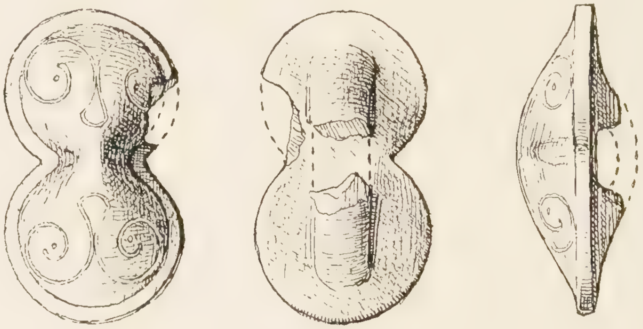

FIG. 207. LAPIS LAZULI BEAD IN FORM OF 8-SHAPED SHIELD ($\frac{2}{1}$).

Associated with Minotaur.

But it is of special interest to observe the joint recurrence of these same symbols in the field beneath a figure of the Minotaur, on a lentoid gem of Spartan basalt (Fig. 212), that was obtained by me in 1896 from the Psychro Cave. On a similar bead-seal of haematite, already illustrated,[2] found near Knossos, an eight-rayed star, undoubtedly a solar emblem, appears beneath the monster. In view of such associations, it may indeed be asked whether some mythic and religious attributes had not already begun to attach themselves in Minoan days to this particular conjunction of man and beast. The composite figure itself, indeed, must, as already pointed out, be taken as one of a group—such as the man-lion, the man-goat, the man-stag, or the eagle-woman,—due originally perhaps to the continual need of the engraver of signets to vary his type and, in a general way, to artistic fancy and caprice. But, in the case at least of the female forms with the heads of eagles or Griffins, we learn from the 'Ring of Nestor' that they had already been adopted as religious agents. She Griffins or eagle-headed women there take part in the ceremony of initiation, where they conduct the candidates for admission into the Minoan Elysion to the enthroned Griffin who plays the part of Chief Inquisitor.[1]

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[1] See A. E., *Ring of Nestor*, &c., pp. 5, 6.

[2] *P. of M.*, i, p. 359, Fig. 260, *d*.

In one shape or another, whether it is borne as a kind of Palladium in

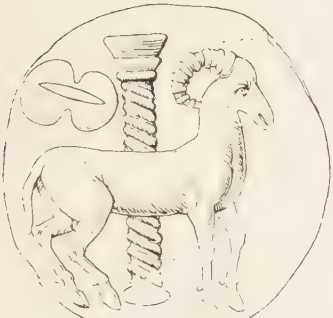
FIG. 208. SEALING FROM 'CORRIDOR OF BAYS' ($\frac{2}{1}$).

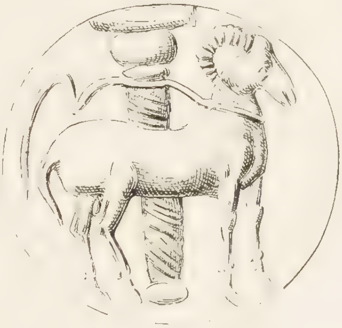
FIG. 209. SEALING FROM 'R. OF ARCHIVES' ($\frac{2}{1}$).

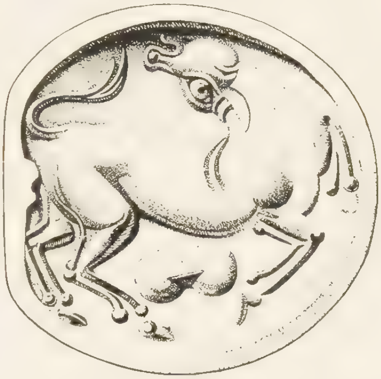
FIG. 210. JASPER BEAD-SEAL, RETHYMNOS, CRETE: A. E ($\frac{2}{1}$).

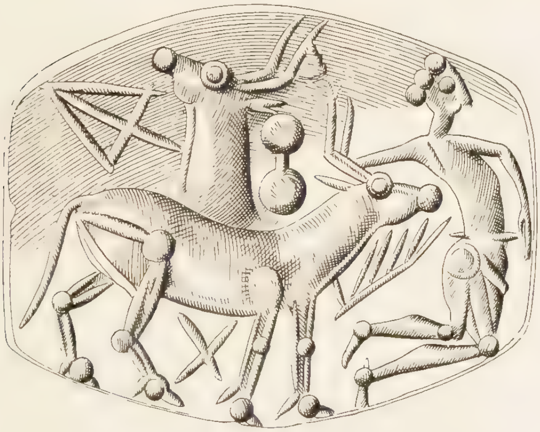
FIG. 211. HAEMATITE BEAD-SEAL, CRETE: B. M. ($\frac{3}{1}$).

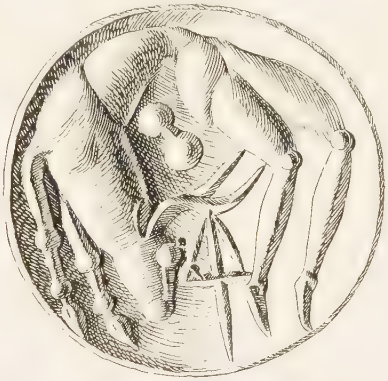
FIG. 212. HAEMATITE BEAD-SEAL, PSYCHRO CAVE: A. E. ($\frac{2}{1}$).

the hands of the divinity, or is itself, like a baetylic stone, a vehicle of possession, or again appears as a sacral symbol on signet-types or, by itself, in amuletic form, this eight-shaped shield could not fail to have strong religious associations in Minoan eyes. The array of painted shields, tier on tier, however suggestive of temporal might to those who passed and re-passed them on the successive flights of the Grand Staircase, could also by implication reflect the power of the great Goddess that they symbolized, and to whom, in the Psalmist's words, 'the Shields of the Earth' belonged.[2]

Parade of shields on stairs suggestive both of temporal power and divine protection.

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[1] See A. E., *Ring of Nestor*, p. 69 seqq., and see above, p. 154.

[2] Psalm xlvii. 9.

§ 83. ‘Hall of the Double Axes’ as reconstituted.

Down Grand Stairs to lower Halls; Control of doors—marks of their swing and bolts; Massive wooden lintels; Great heaps of calcined material; Remains of carbonized columns; Downward taper of Shafts—comparison with primitive stone pillars of Malta and Balearic Islands; Knossian examples of such now to hand; Impressions of flutings on clay plaster; The ‘Hall of the Double Axes’—floor above reconstituted; Gypsum elements of lower Hall thus preserved; Wooden framework filled in with cement; Painted spiral frieze above dado slabs; Western Section of Hall—An ‘Audience Chamber’; Central Section or ‘Inner Hall’; Eastern or ‘Exterior’ Section—its Well; Symmetrically opposed doorways of Eastern Section; Back passage to ‘Queen's Megaron’; Connexions with stepway from S.E. of Central Court; Roofed Annexe to N.E. of this Section; E. Wall and S. Corner—View of Eastern and Southern Porticoes as restored; Discovery of descending steps by S.E. doorway—Access to Corridor of ‘Labyrinth Fresco’; ‘Tarazza’ flooring of Light-courts; Results of tests beneath pavements; Early ceramic and fresco remains; Gypsum paving of Hall M. M. III a*; Area of Hall; High walls of Light-courts; Traces of remains of wooden Canopy and Throne in ‘Audience Chamber’; Inner Section of Hall; Door-jambs serving as piers between Sections; Elasticity of System; Two-leaved doorways; Window-like openings above doorways; Red-coloured panes—? parchment; Inner Hall capable of isolation; Spiral frieze compared with that of ‘Shield Fresco’; Presumption that real shields were hung along fresco; Actual shields replaced, in replica, on wall; Restored view of Inner Hall—the Chieftain at ease; Religious side of scene; Indications of Double Axe Cult; ‘Rhyton’ for libation; Clay ‘fire-box’ from Well; Baetylic cult of Double Axes.*

Down Grand Stairs to lower halls.

As in the case of certain private dwellings, such as the South-East House and the Royal Villa, the principal access to the more important Chambers of the Domestic Quarter was from above. They were primarily reached from the fourth landing of the ‘Grand Staircase’ which was entered, at a slightly lower level, from the Central Court.

It debouched below on the Northern wing of what has been known as the ‘Hall of the Colonnades’, which is formed by the staircase-well and two covered columnar galleries. From the Northern of the Galleries, thus approached, a doorway led into the ‘Lower East-West Corridor’ and from this, a little distance to the right, another entrance,—this time constructed for double doors,—opened into the Western covered section of the greatest of the actual living-rooms of the Palace, 'the Hall of the Double Axes', so-called from the axe signs incised on the blocks of its West light-court wall.[1]

Control of Doors.

Control of doors: marks of their swing and bolts.

These two doorways and another leading to an interior corridor from the East Gallery of the 'Hall of the Colonnades' derive a special interest not only from the clear manner in which they show the sockets for the wooden posts and metal pivots and bolts, but from the exceptional preservation of the curved scorings on the thresholds, due to the swing of the doors. With these, in Mr. Theodore Fyfe's drawing, Fig. 213,[2] is also grouped the West Entrance and a good example from the Pillar Room of the Royal Villa. It will be seen from the scorings that in the case of two-leaved doorways one door was sometimes narrower than the other, so that a space of only about a third or half a metre could be left open.

It will be further seen that, as approached from the Grand Staircase, the control of the passages opening from the 'Hall of the Colonnades' was on the inner side of the doors. So, too, the control of the double door leading from the 'Lower East-West Corridor' into the 'Hall of the Double Axes' was from the side of the Hall. Both in the Palace and in private Houses great attention was paid to the side on which the doors were secured. It was always on the more private side.

Massive wooden lintels.

The first section of the Lower East-West Corridor, before reaching the 'Hall of the Double Axes', was lit by a broad window, opening into its Western light-well. It was found, as already mentioned, half filled in by sunken blocks that once supported its massive wooden lintel, and the raising of these to their original level had been a serious task in the early part of the excavation.[3] The wooden lintel itself—consisting, like other neighbouring examples, of four beams about a foot (*c.* 30 centimetres) square, laid side by side—had here supported some 5½ tons of masonry.

Great heaps of calcined material.

In the case of the Grand Staircase, attention has been called to the chemical carbonization of woodwork, which there must have certainly operated, allowing time for the infiltration of the supporting material. But the masses of calcined limestone and gypsum from the upper stories found

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[1] See *P. of M.*, i, p. 348, Fig. 250.

[2] Cf. A. E., *Report, Knossos*, 1903 (*B. S. A.*, ix), pp. 14, 15, Fig. 6 and note by Mr. Fyfe. Single doors, he points out, where the jambs have only one reveal, often occur at the end of a system.

[3] *P. of M.*, i, pp. 352, 353, and compare Figs. 253 *a* and *b*.

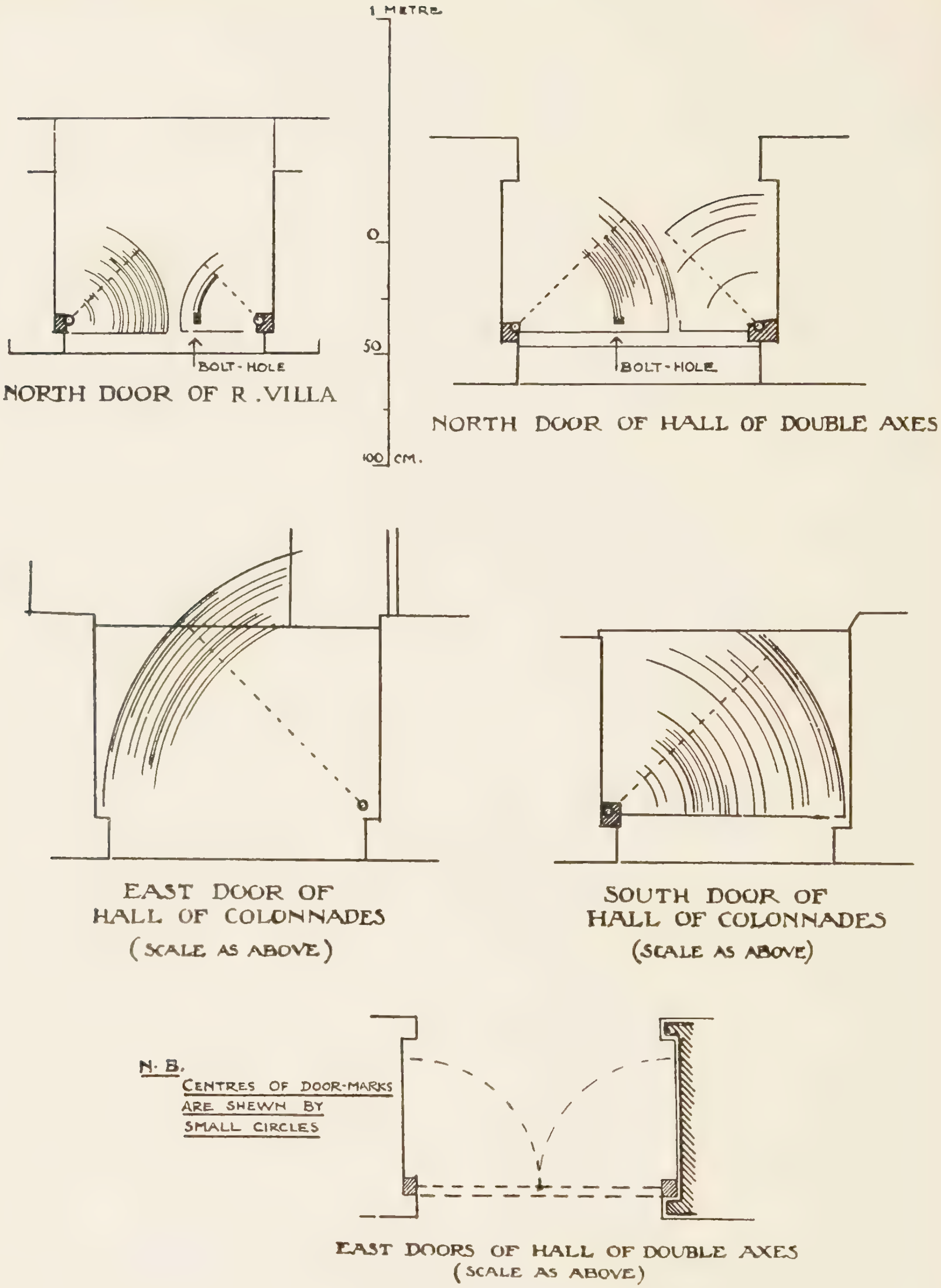
1 METRE
0
50
100 CM.
BOLT-HOLE
NORTH DOOR OF R. VILLA
BOLT-HOLE
NORTH DOOR OF HALL OF DOUBLE AXES
EAST DOOR OF HALL OF COLONNADES
(SCALE AS ABOVE)
SOUTH DOOR OF HALL OF COLONNADES
(SCALE AS ABOVE)
N. B.
CENTRES OF DOOR-MARKS ARE SHEWN BY SMALL CIRCLES
EAST DOORS OF HALL OF DOUBLE AXES
(SCALE AS ABOVE)

Fig. 213. Holes for Bolts and Scorings on Thresholds marking Swing of Doors.

in the light-well of the Staircase, especially towards the South-East corner of the basement area of the 'Hall of the Colonnades', were certainly due to the direct action of fire, and similar phenomena occurred in the West light-well of the 'Hall of the Double Axes'. Here, too, we had to cut our way down from about three metres above the floor-level through a calcined mass of pale brick-red earth,—almost as hard as the native limestone,—which had to be attacked with picks. In this case, again, great heaps of lime which probably had to do with an extensive scheme of redecoration were piled on the floor and against the side walls.

Remains of Carbonized Columns: Downward Taper, Reeding and Fluting.

Remains of carbonized columns.

Here, too, as in the neighbouring area, this accumulation from above had preserved the shafts of the two wooden columns on the borders of the open area in a remarkable manner. Both of these sloped slightly away from the position of their bases in a South-Easterly direction. Their material was of the usual cypress wood[1] and in the case, already referred to,[2] of the more Northerly of the two, which was the better preserved, a length of 2·60 metres, out of a total height of about 3½ metres, could be made out. A distinct taper downwards was perceptible, the lower extremity of the shaft in its semi-carbonized condition being 45 centimetres in diameter, while near the top it had a width of at least 10 centimetres more.

Downward taper of shafts.

Although in Late Minoan times there seems to have been a tendency to make the shafts of columns of an even diameter, it is impossible to ignore the evidence supplied by the M. M. III frescoes[3] and repeated in small ivories like those of Spata and Menidi as to their original taper. The convenience of a tapering form in working up an original trunk is itself obvious, and a good illustration of such a usage has been supplied by the main beam of the pillar room of the Royal Villa, which—as shown by the sockets for it left in the construction—was somewhat rudely fashioned out of a trunk, one end of which thickened out considerably. The upright wedge of dovetail shape is in the same way inserted in the masonry of the 'East Corridor' (Suppl. Pl. XXXV, *a*).

This Minoan usage of making columns that tapered downwards to their base has puzzled architects accustomed to Egyptian, Greek, and later forms,

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[1] *Cypressus horizontalis*, rather than *sempervirens*. See *P. of M.*, ii, Pt. I, p. 7, note 3.

[2] *Ibid.*, i, p. 343 and note 4.

[3] As for instance those beneath the Cist floors of the Thirteenth Magazine at Knossos, *P. of M.*, i, p. 443, Fig. 319 (*B. S. A.*, x, Pl. II), and the related fresco from the Palace Megaron of Mycenae, *P. of M.*, ii, Pt. II, p. 601, Fig. 373, *d*.

Comparison with primitive stone pillars of Malta and Balearic Islands.

yet it is difficult to see why this arrangement is not as much structurally justified as the others with the upward taper. In the case of wooden posts this reversed arrangement is necessary to counteract a possible flow of sap and consequent budding. Elsewhere I had already referred to the parallels presented by the stone pillars that support the vaults of primitive monuments known as *Covas* and *Naus* in the Balearic Islands, and, again, to similar examples from the side cells of the megalithic buildings of Malta, which, as has been shown, stood in a direct connexion with Crete (see Fig. 214). But some very telling parallels have been since supplied at Knossos itself in the pillars formed of blocks gradually increasing in size that served as the supports for the actual bases of the columns in the 'Stepped Portico' leading up to the Palace from the bridge-head of the Great South Road. (See Fig. 215.)

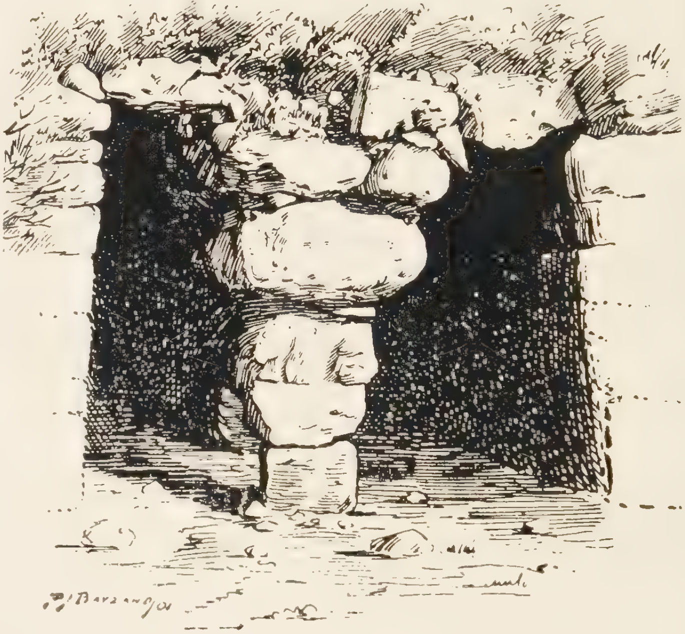

Fig. 214. Pillar supporting Roof of 'Nau', Minorca. (A. E., *Myc. Tree and Pillar Cult*, Fig. 61.)

Knossian example now to hand.

That examples of such a class of stone pillars should thus have made their appearance on the site of Knossos itself affords a strong corroboration of the suggested influences of such on upward tapering wooden shafts of the Minoan architects. In the 'Stepped Portico' these but repeated the stone pillars below.

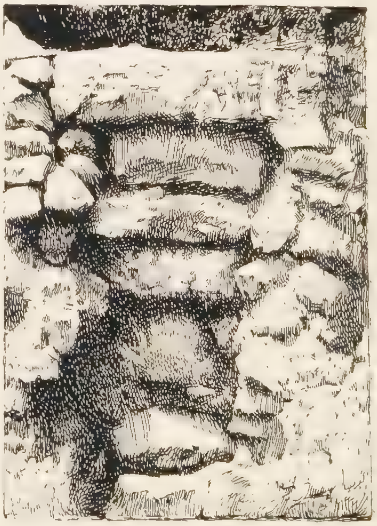

Fig. 215. Stone supporting Pillar of 'Stepped Portico'.

The existence of fluted columns within the Palace has been already ascertained in the case of a carbonized shaft found on the upper-story level

South of the 'Hall of the Colonnades'.[1] Further evidence was afforded by the discovery during the explorations of 1929, on the lower terrace, N.E. of the Eastern Portico, of a lump of clay plaster bearing the impressions of two sections of wooden shaft with convex flutings. (See Suppl. Pl. XXXV, *b*.) These impressions partly overlapped one another, showing that the shafts were already displaced at the time when they left their record on the plastic material. According to Mr. Piet de Jong's calculation the flutings had originally numbered 28 and the diameter of the shaft at the point where the impressions are best preserved would have been 35 centimetres. It will be shown below[2] that the impressions left of wooden colonnettes, belonging to a canopy in the first Section West of the 'Hall of the Double Axes', afford further examples of the concave class illustrated on a larger scale in the Lustral Area of the 'Little Palace'.[3] The reeded form, derived from the upright sheaves of papyrus stalks used as supports for shanties on the Nile banks,—the origin of the Egyptian column,—was doubtless the earlier, and convex fluting is simply due to its reversal as seen in the stucco impressions.

Impression of flutings on clay plaster.

Reconstitution of Upper Elements of 'Hall of the Double Axes' and covering over of Floor Space.

In dealing with the Hall above, it has been already shown that the upper part of the inner piers of the 'Hall of the Double Axes' above the jambs of the triple line of doorways had maintained their cohesion to such a degree that they had supported, in a series of instances, the corresponding door-jambs above, though, owing to the carbonization of cross-beams, these had sunk somewhat beneath their original position. These upper elements, including remains of pavement, had perforce, in the course of excavation, to be temporarily removed, but in accordance with the scheme of reconstitution executed for me by Mr. Piet de Jong in 1928 with the help of the new facilities afforded by ferro-concrete, they have been replaced at their proper level, the pavement above being restored, so that the whole floor-space of the Hall below, to the borders of its outer colonnades, has been roofed over.

'Hall of Double Axes': floor above reconstituted.

This consummation, for which I had not at first dared to hope, will, it is to be trusted, save from final ruin the remains of the gypsum pavement that at the time of excavation still covered almost the whole ground floor of the Hall as far as the outer borders of the colonnades and which was in a state of rapid deterioration from the effects of autumn and winter rains. It has also given effectual protection to such parts of the gypsum dadoes as still clung to

Gypsum elements of lower Hall thus preserved.

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[1] *P. of M.*, i, p. 344.

[2] See p. 333 seqq.

[3] *Ibid.*, ii, Pt. II, pp. 521–3 and Figs. 323, 324.

Wooden framework filled in with cement.

the walls. These, however, were themselves found in a very imperfect state, revealing thus the inner wooden framework and intervening panels of limestone masonry of which the walls were constructed. This typical M. M. III timbering of the walls has already received sufficient illustration.[1] (See opp., Fig. 216.) As the carbonized and brittle core of the actual wooden beams could not be preserved from continual disintegration, the gaps left by the already decomposed woodwork between the masonry panels have been filled in with cement, thus restoring the stability of the walls.

Spiral frieze above dado slabs: significant absence of painted shields.

Even above the level of the gypsum dado slabs the original timbering would not have been visible, since, as is shown by the existing wall-decoration of the small neighbouring Bath-room, it was covered by a coating of painted stucco. Here as there, moreover, there was placed, in a period subsequent to the great seismic disturbance about the close of M. M. III *b*, a similar decorative design in the shape of a frieze of spirals and rosettes. Remains of such were in fact found, though in a much broken condition, at the foot of the South Wall of the first Section of the Hall (approached, as above indicated, from the 'Hall of the Colonnades'), of the North Wall of the Central Section (see Fig. 225), and of the Staircase wall facing the Southern portico. (See Fig. 216.) The spiral design here resembled that of the Bath-room, with slightly narrower borders and, as indicated below, fulfilled a connecting function parallel to the similar band of the 'Shield Fresco', but in a more material form.

Revised Plan of Hall: its Three Sections.

Western section of Hall.

A revised plan of the 'Hall of the Double Axes' itself and of the light-courts embraced by it is included in Plan E at the end of this Volume.[2] From this it will be seen that in a broad sense it was composed of three main sections. The Westernmost of these consisted of the light-area and bi-columnar portico, above described, forming a deep covered recess and liable to be traversed along its central axis from North to South by a line of thoroughfare between two doorways. One of these opened from the Lower East-West Corridor while the other, opposite to it, led by a short passage with a double turn—the 'Dog's-leg Corridor'—to the more secluded quarters, marked by the 'Queen's Megaron'. This section of the Hall—thus immediately communicating with the main avenue of approach by means of the Grand Stairs and equally adapted for public access and private retire-

An Audience Chamber.

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[1] *P. of M.*, i, p. 347 seqq. and Fig. 251. These timbered panels are also well illustrated by the 'Lobby of the Wooden Posts', p. 273, Fig. 184, above.

[2] An amplified and somewhat corrected version of the plan, *ibid.*, i, pp. 328, 329, Fig. 239.

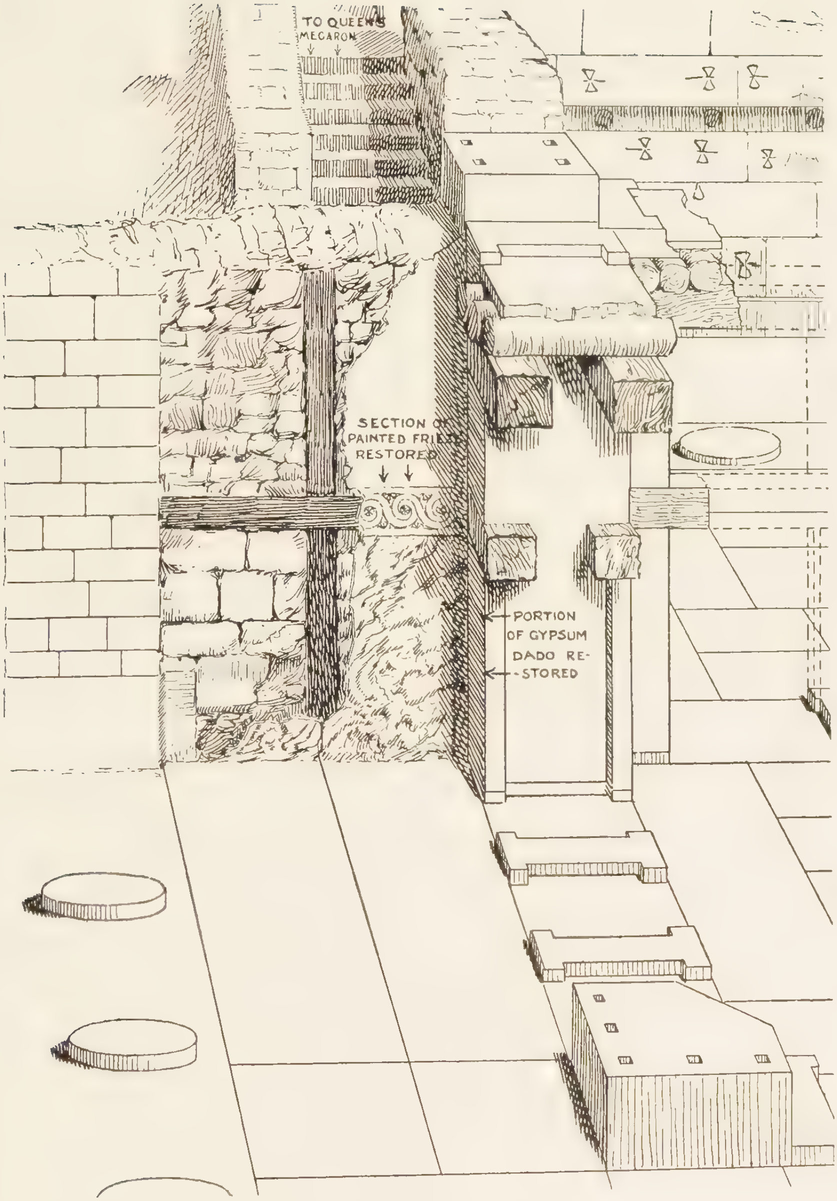
TO QUEEN'S MEGARON
SECTION OF PAINTED FRIEZE RESTORED
PORTION OF GYPSUM DADO RE-STORED

Fig. 216. Sketch of South Portico of Central Section of 'Hall of the Double Axes' with Upper Elements removed; showing Second Flight of Private Staircase from 'Queen's Megaron' beyond.

ment—stands out pre-eminently as its chief reception area. We shall see that its function as an audience chamber was clearly indicated by the actual evidences of the canopy of a throne.

Central section or 'Inner Hall'.

The central section, immediately bordering this on the East, could be entirely shut off from the rest by closing the double doors on three sides of it. It may be described as the 'Inner Hall'.

Eastern or 'Exterior' section.

The area, again, East and South of this, with its spacious light-courts fronting its two porticoes, though walled in on all sides, must have formed the principal open-air resort of the whole system and throughout a large part of the year at least the chief centre of social life and intercourse.[1]

Well.

One convenient addition to it—made apparently at the time of the Restoration about the close of M. M. III *b*—was a well in the South-West angle of the covered part of this Section.[2] Its diameter was 90 centimetres, and it descended 13·40 metres (about 44 feet). The bulk of the remains found in this belonged to the L. M. I, but a certain proportion represent the last phase of M. M. III. Some L. M. III *b* sherds also occurred among the rubble with which it was finally choked.

Symmetrically opposed doorways to Eastern section.

This area may be described as the 'exterior section' of the Hall, since, apart from the open character of its porticoes facing South and East, its communications with the outside world on those sides were amply provided for. There seem to have been two doorways in the outer walls opposite to one another. One of these, of which remains were preserved, including its Western jamb,[3] opened directly on the landing of another staircase leading down to the Easternmost terrace. This landing lay at the original termination of the Lower East-West Corridor and, later, at the foot of the 'East Stairs' of the L. M. I *a* restoration.[4] The doorway, moreover, faced another on the other side of the landing, giving entrance to the 'East Portico' described above,[5] the open prospect from which, on the rich river valley and the rugged heights beyond, offered a refreshing contrast to the walled-in light-courts of the Hall itself.

There are also indications of another doorway, now restored, of the Exterior Section of the Great Hall, shown in the plan, Fig. 218, and diametrically facing that already described near the South-Eastern angle of the light-

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[1] That it was partly reoccupied by later squatters in the closing phase of L. M. III appears from the numerous sherds of that date found above a later clay floor in the Southern light-area.

[2] Erroneously placed outside the Portico in Plan C.

[3] In the earlier Plan, *P. of M.*, i, Fig. 239 (cf. Plan B) the position of this doorway was inaccurately given. It was, however, exactly ascertained by the supplementary researches of 1928.

[4] See above, p. 274 seqq.

[5] See above, p. 272 seqq.

Connexions with stepway from S.E. of Central Court.

court on this side. The symmetry with the doorway in the North wall is, in fact, carried further by the circumstance that it, too, opened on the landing of a staircase leading down to the lower terrace on the East. The researches of 1929 brought out the fact that at this point the massive exterior wall above the terrace on this side, which forms the back wall of the light-area of the 'Hall of the Double Axes' on the East, here turns West—after leaving an interval between it and the interior wall in which the doorway opened—of just the width of the Staircase on the North border.

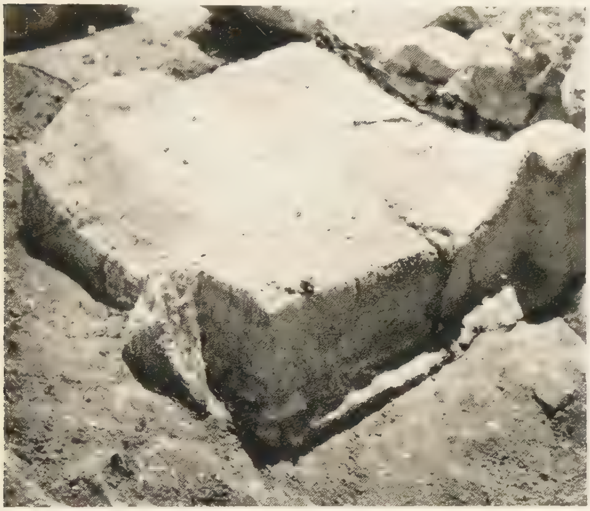

Fig. 217. Re-used Block with Door-jambs.

There are strong grounds for believing that this interval stands in connexion with an open stepway, of which mention has already been made. This stepway, according to the East Palace plan as carried out at the time of the Great Restoration, ran down the East slope from near the South-East corner of the Central Court. (See Plan, Fig. 218.) It was accompanied, as we have seen, by a descending runnel with parabolic curves[1] like that of the East Bastion.

Back passage to 'Queen's Megaron'.

In addition to these more public connexions, an open Corridor led from the West end of the Southern light-area to the private passage and apartment behind the 'Queen's Megaron'. Ladies would thus have had their private entrée to this social section of the great Hall without the necessity of passing through the 'Audience Chamber' and the 'Inner Hall'. It must be remembered, moreover, that, thanks to the upper balconies on two sides, conversational intercourse was made easy with the chamber above.

Roofed annexe N.E.

By the North-West corner of this 'Exterior Section' of the Hall was a small continuation of its roofed area which enabled those wishing to reach the staircase-landing of the East Portico beyond to pass under cover in that direction. This little roofed annexe was supported by a pier, resting on a re-used block[2] which, as will be seen from Fig. 217, showed the reveals of two door openings belonging to some earlier system.

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[1] See above, p. 245, Fig. 171.

[2] This block seems to have supported a pier rather than a column as suggested, *P. of M.*, i, p. 329 note. The further suggestion there made that there was a peristyle on this side cannot be maintained.

Supplementary researches carried out by me in 1928 first made it possible to trace the foundations of the wall in this corner of the Hall, which, at this point, crossed a large stone-built drain and thence closely followed its Southern course. By the South-East angle it was built over the emissary formed by three united channels of the elaborate drainage system of this Quarter.[1] Along this line the upper structures of the wall—now restored in part to the height of the floor above—had fallen away, owing to the fact that it stood on a terrace edge. Considerable remains of the foundations, moreover, came to light near the S.E. corner, first methodically explored in 1929, and have afforded a secure base for the reconstitution of the lower courses of the wall as it turned West. The greater part of this Southern wall of the light-area had been preserved above ground, but, being an interior construction, it was of lesser thickness than that to the East, *c.* 80 centimetres as compared with nearly a metre. Owing to the difficulties experienced in passing over the confluence of two great drains on that side, this wall had been slightly deflected from its course. (See Plan, Fig. 218.)

E. wall and S.E. corner of Hall.

From near the doorway at the South-East angle of this Section a specially fine view opens of the Eastern and Southern Porticoes of the Hall as now restored (Fig. 219).

Discovery of descending stairs by S.E. doorway.

Two conclusive finds, moreover, made in 1929 have established the fact that, as in the case of the opposite doorway on the side of the 'East Portico' already described, the entrance on this side stood in direct connexion with a staircase descending Eastwards to the terrace level immediately below. One of these was the emergence *in situ* of a limestone base-stone with the usual cutting for a step, probably of gypsum, as in the case of the corresponding stairs South of the Hall. The other suggestive phenomenon was the appearance—actually jutting out from the outer wall-line—of part of the coping of what had clearly been a balustrade. This probably marked a turn of the staircase in a Southern direction. (See Plan, Fig. 218.)

Access thus gained to 'Corridor of Labyrinth Fresco'.

On the terrace level thus reached the 'Labyrinth Fresco'—so interesting in relation to local tradition—had been previously discovered,[2] together with the painted stucco dado with a veined decoration imitating that of alabaster or fine gypsum. The passage-way to which this belongs, which would also have served the staircase South of this, may well have led, as already suggested, in the other direction to a 'Water Gate' at the South-East angle of the Palace. We hardly need to recall the great suggestive interest of the

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[1] See *P. of M.*, i, Plan, Fig. 171 *a*.

[2] *Ibid.*, i, p. 350 seqq., and Figs. 255, 256.

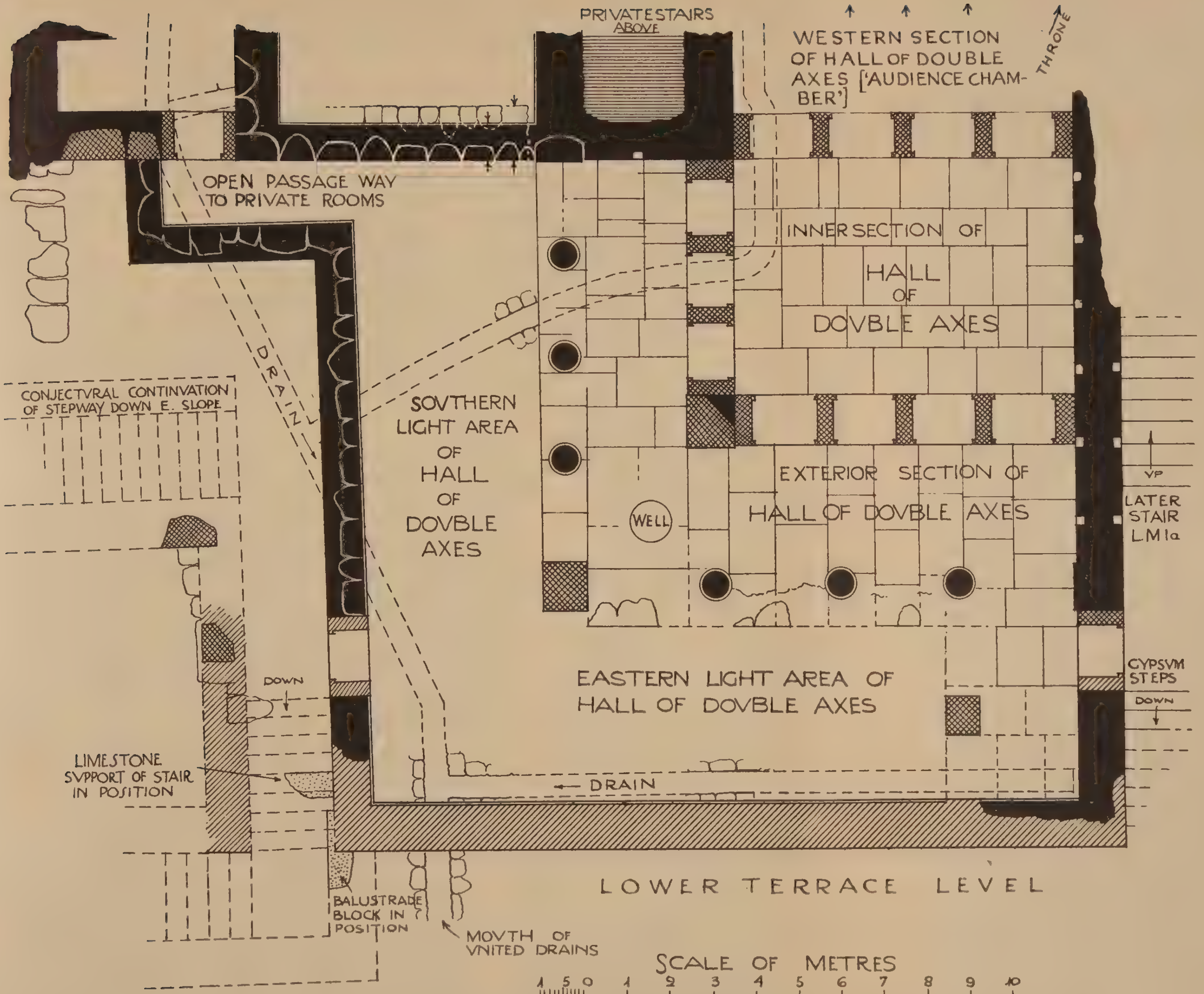
PRIVATE STAIRS ABOVE
WESTERN SECTION OF HALL OF DOUBLE AXES ['AUDIENCE CHAMBER']
THRONE
OPEN PASSAGE WAY TO PRIVATE ROOMS
INNER SECTION OF HALL OF DOVBLE AXES
DRAIN
CONJECTVRAL CONTINVATION OF STEPWAY DOWN E. SLOPE
SOVTHERN LIGHT AREA OF HALL OF DOVBLE AXES
WELL
EXTERIOR SECTION OF HALL OF DOVBLE AXES
VP
LATER STAIR L.M.Ia
GYPSVM STEPS
DOWN
DOWN
EASTERN LIGHT AREA OF HALL OF DOVBLE AXES
LIMESTONE SVPPORT OF STAIR IN POSITION
DRAIN
LOWER TERRACE LEVEL
BALUSTRADE BLOCK IN POSITION
MOVTH OF VNITED DRAINS
SCALE OF METRES
1 5 0 1 2 3 4 5 6 7 8 9 10

Fig. 218. Revised Plan showing Central and Eastern Sections of 'Hall of the Double Axes' and Adjoining Area.

E. wall
and S.E
corner
Hall.

Dis-
covery
descen
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by S.E
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Access
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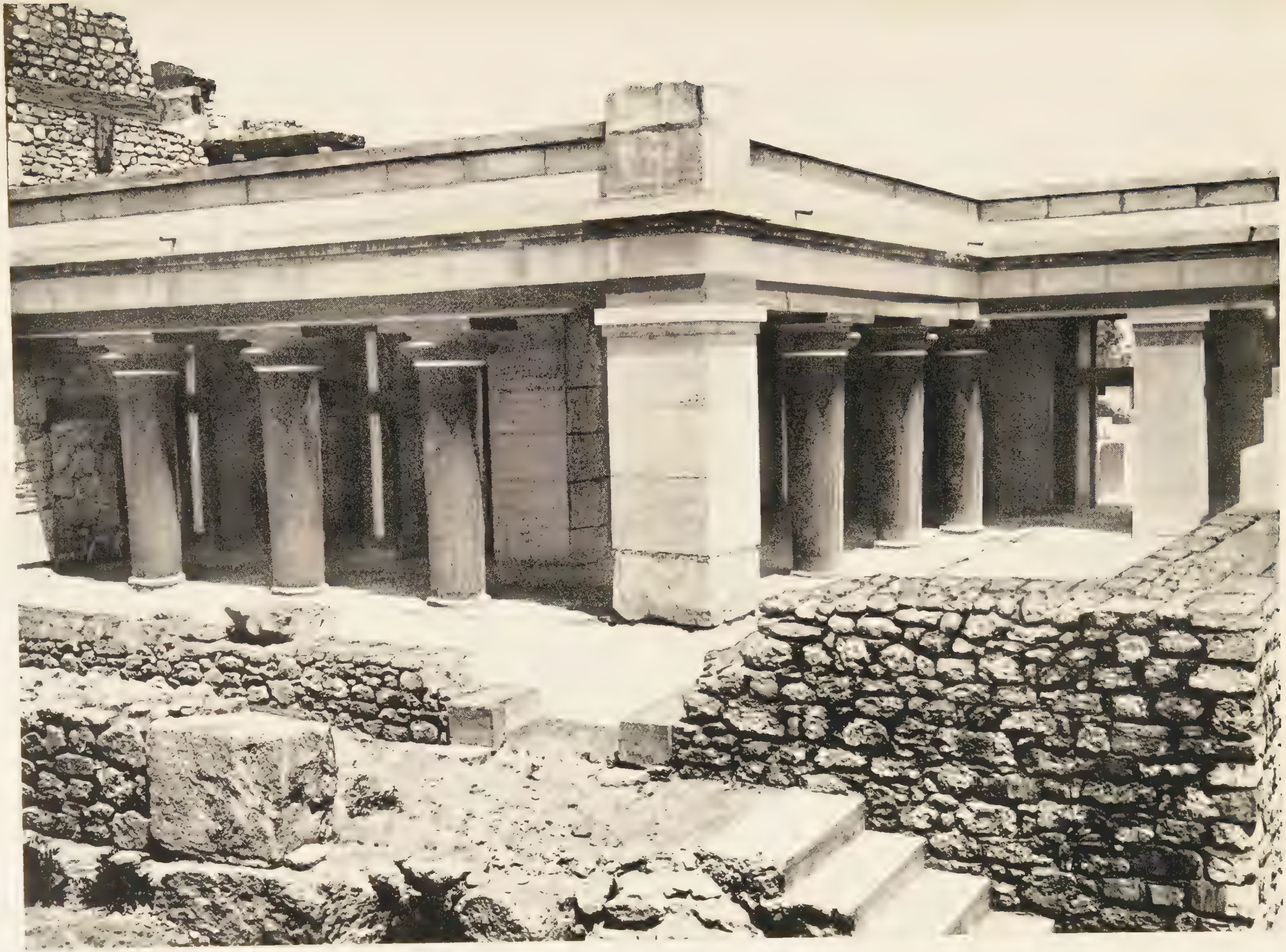

Fig. 219. View of Southern and Eastern Light-area of ‘Hall of Double Axes’ as reconstituted from Staircase at S.E. Corner leading to ‘Corridor of Labyrinth Fresco’.

appearance of this maze pattern—precursor of the traditional Labyrinth in Art as seen on the coins of the historic Knossos.[1]

'Tarazza' pavement of Light-courts.

Throughout the light-courts of the 'Hall of the Double Axes', to which we must return, there was much remains of the 'tarazza' pavement, consisting of a calcareous cement mixed with small pebbles, and in some places there were traces of more than one layer. In the Western area and, partly, farther South, this is immediately overlaid on the Neolithic, showing that in one way or another the surface of this pavement must have been continually renewed.[2]

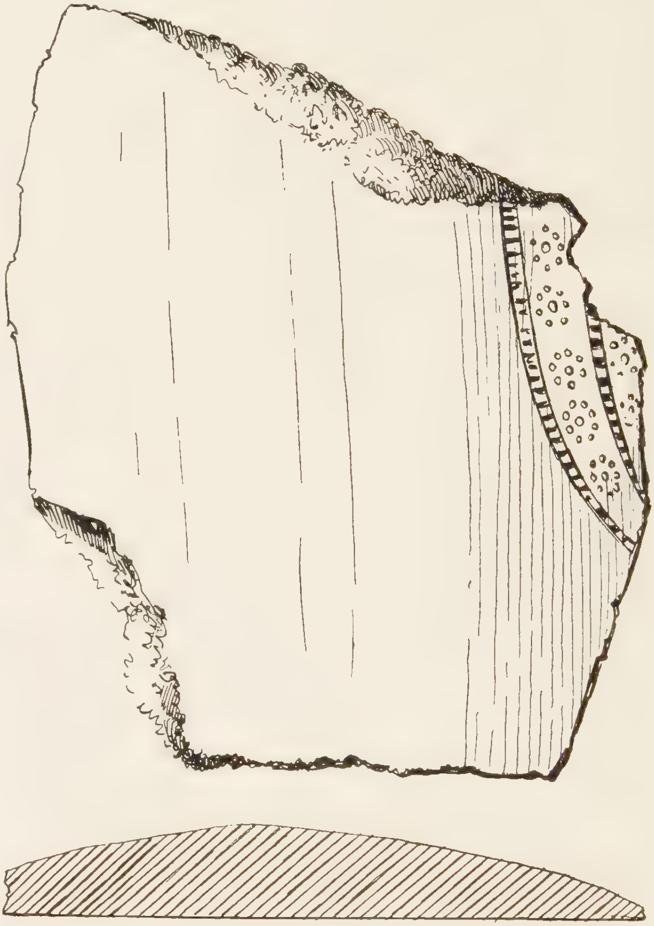

Fig. 220. Fragment of Painted Stucco Relief showing Part of a Man's Thigh ($\frac{1}{2}$).

Results of tests beneath pavements.

In the Eastern Light-court there were also remains of a later flooring of plain clay plaster dating from the time of the Reoccupation and overlaid with fragments of pedestalled cups and other characteristic fabrics of the L. M. III *b* Period. Beneath this later layer and between it and the finer 'tarazza' were many remains of vases belonging to the last Palatial phase

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[1] See *P. of M.*, i, pp. 358, 359, and Fig. 260, *f* 1, *g*.

[2] In the Westernmost section of the Southern Light-court the old surface was for some reason at a slightly lower level and passed under the outer edge of the E. wall of the 'Queen's Megaron', itself, as will be shown, in its existing shape a relatively late construction. In this section a later 'tarazza' pavement is visible, 12 cm. above the other, and standing in relation with this later wall (M. M. III *b*).

(L. M. II) including parts of great amphoras of the 'Palace style'. Some sherds, however, went back to the early part of L. M. I.[1] Here, too, were brought to light the fragments of the painted stucco frieze already referred to in connexion with the Hall above,[2] which in all probability had been thrown out from there at the time of its final redecoration. In the Southern light-well, in the same association of fine Late Minoan pottery, was found a part of a painted stucco bas-relief of a man's thigh, life-size, showing the edge of a brilliantly coloured loin-cloth (Fig. 220).[3] This points to an earlier system of wall-decoration in this area than that represented by the spiral frieze, and if, as seems probable, it, too, was derived from the Upper Hall, suggests a processional composition in a style analogous to that of the 'Priest-King' relief.[4]

Early ceramic remains.

A series of test excavations conducted by me in 1913 beneath the gypsum pavement slabs of the covered sections of the 'Hall of the Double Axes' led to the conclusion—of great value for the general chronology of this structure—that they were laid down at a time when sherds of the mature M. M. III *a* phase were stratified. The purest and most decisive evidence was brought out under the central slabs of the North borders of the inner Section.[5] Several cups were here found of both of the two comparatively early M. M. III shapes represented by those bearing the ink-written inscriptions in the Linear Class A.[6] A part of a high jug resembled that with an incised inscription of the same date found in the South-West Palace region.[7] A fragment of a pot occurred showing Indian red chevrons on a dark ground and illustrating the earlier polychrome stage of M. M. III ceramic art. There were one or two intrusive M. M. I and II sherds and some pieces of painted plaster with a fine grain, but no single L. M. I fragment nor anything, indeed, later than the acme of M. M. III came to light. The deposit here went down 1·30 metres before the Neolithic clay was reached. So, too, under a slab at the West end of the Hall near the door opening into the Corridor, the deposit between it and the Neolithic (38 centimetres down) was pure M. M. III,[8] one fragment of a cup, however, being of a transitional M. M. II style. A similar result was obtained under another slab of the pavement, a little South of this, where the Neolithic was reached at a depth of 60 centimetres.[9] The deposit here, moreover, contained some painted stucco

Remains of M. M. III *a* painted stucco.

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[1] 1913, Tests 41, 81–4. Only a few intrusive sherds of M. M. II and III occurred where the good 'tarazza' had been broken through.

[2] See above, p. 295 and Fig. 193.

[3] A. E., *Knossos, Report*, 1902, p. 42.

[4] *P. of M.*, ii, Pt. II, p. 774 seqq., and cf. p. 784, Fig. 511 and Coloured Frontispiece.

[5] 1913, Test 40, *a*, *b*.

[6] See *P. of M.*, i, pp. 613–15.

[7] *Ibid.* pp. 616–17.

[8] 1913, Test 42.

[9] 1913, Test 43. On the other hand, under a slab at the S.E. corner of the Hall where the deposit had been slightly disturbed

fragments in the somewhat sombre hues characteristic of the earlier part of the Third Middle Minoan Period and of the preceding epoch. Some of these showed a grey-blue face with fine string-marks, the colour recalling the prevalent tint of the interior of the Northern Lustral Area.[1] This belongs to a time when the brilliant blue smalt or *kyanos* of Egyptian derivation was not yet so readily obtainable. Other pieces of this early wall-decoration presented a terra-cotta ground colour with deep Indian red bands bordered by white.

Only in part of the South Portico of the Hall[2] and on the borders of that to the East[3] did the exploration of the deposit immediately underlying the gypsum paving produce different results. In both these cases a very pure element was encountered representing a fairly mature stage of the M. M. II style. The practical non-existence of a M. M. III stratum here seemed to be an indication that an existing M. M. II pavement had been removed in these areas and replaced practically at the same level by the later slabbing.[4] This view, indeed, received striking confirmation from the appearance on the borders of the Eastern Portico of slabs of a 'Mosaiko' pavement of the M. M. II class immediately under the gypsum slabs.

Gypsum paving of 'Hall of Double Axes' M. M. III *a*.

This exceptional phenomenon, however, does not affect the general results of these investigations which show that the gypsum paving of the 'Hall of the Double Axes' dates back to the M. M. III Period—apparently to a mature stage of its earlier phase (*a*).

From this it follows, moreover, that the gypsum dado slabs set against the lower surface of the walls, the lower borders of which were secured by the paving-slabs laid alongside of them, must be referred, together with the fabric generally, to the same date—answering to the mature phase of M. M. III *a*—as the pavement itself. This, it may be remarked, carries back the date of the original structures including the whole framework of the 'Hall of the Double Axes' to the seventeenth century before our Era.

Area of Hall.

Reckoning in its light-areas, this great Hall included a space of as nearly as possible 341 square metres, its covered sections occupying

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owing to the contiguity of a conduit, though the bulk of the sherds were still M. M. III, of the middle period, a few L. M. I sherds had intruded themselves. Here was also found a fragment of a 'Medallion pithos', a form of vessel characteristic of the closing M. M. III phase.

[1] See above, p. 9.

[2] Explored in 1903 (K. 03, B. 129). Part of a fine polychrome vessel was found here with vermilion bands and raised concentric rings on a black ground.

[3] A few intrusive M. M. III sherds also occurred (B. 130).

[4] The superposition of the later gypsum pavement of the Central Court on the M. M. II stratum containing the 'User' monument affords a striking instance of a similar phenomenon (see *P. of M.*, i, p. 286).

202 square metres, or roughly two-thirds of this. When thrown open to its full extent it would have been one of the largest of the Palace chambers.

High walls of light-courts.

As has been already pointed out above, the pleasant view up the valley afforded by the gaps in the Eastern and Southern walls of the 'exterior' light-area does not by any means give a true impression of the original arrangement. There can be no doubt that, as in the case of the light-well at the West end of the Hall, the walls went up at least some way above the level of the floor above. Eight limestone courses of the back wall of this Western Court had been actually preserved as well as the remains of the horizontal beam above the fourth course. We know, moreover, from its structural connexions on both sides, that this Western wall, together with those to the North and South sides of this little Court, had risen at least as high as the top of the second story. In the reconstruction necessary for the back wall of the 'Loggia of the Shield Fresco' the number of 18 courses has been reached, the lower part of the second-story window being inserted.

'Audience Chamber' of 'Hall of the Double Axes': Traces of Wooden Canopy and Throne.

Remains of wooden canopy in 'Audience Chamber'.

For the section of the Lower Hall, lighted by means of this Court, the name of 'Audience Chamber' has been suggested above. The masses of lime which, in view, it would seem, of some restoration, had been heaped against its North wall, preserved in part the cast of a large wooden object, with fluted columns on each side in which a throne and canopy has been recognized.

Its Southern wall, with part of the doorway of the 'Dog's Leg Corridor', is given in Fig. 221, the wooden framework being filled in with cement and a part of the frieze restored. The special function of this section is illustrated by the above remains (Fig. 222).

The plaster mass, as will be seen from Mr. Piet de Jong's sketch, Fig. 223, had heeled over somewhat to the left so that the impressions of the two sections of columns on either side as well as of the underlying supports are not on the same level. Allowing for this tilt the original mean level of the column-bases would have been about 90 centimetres above the floor-level. The flutings themselves, which were filled when found with considerable remains of the carbonized shafts, are well defined, and careful measurements show that, near the base, they had each a width of 2·4 centimetres and must have been originally 28 in number, implying a diameter of about 35 cm. If, as is probable, the architrave of the columns had corresponded in height with the spiral band above the dado-slabs it would allow for them[1] a

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[1] Starting from a height of 90 cm. above the floor.

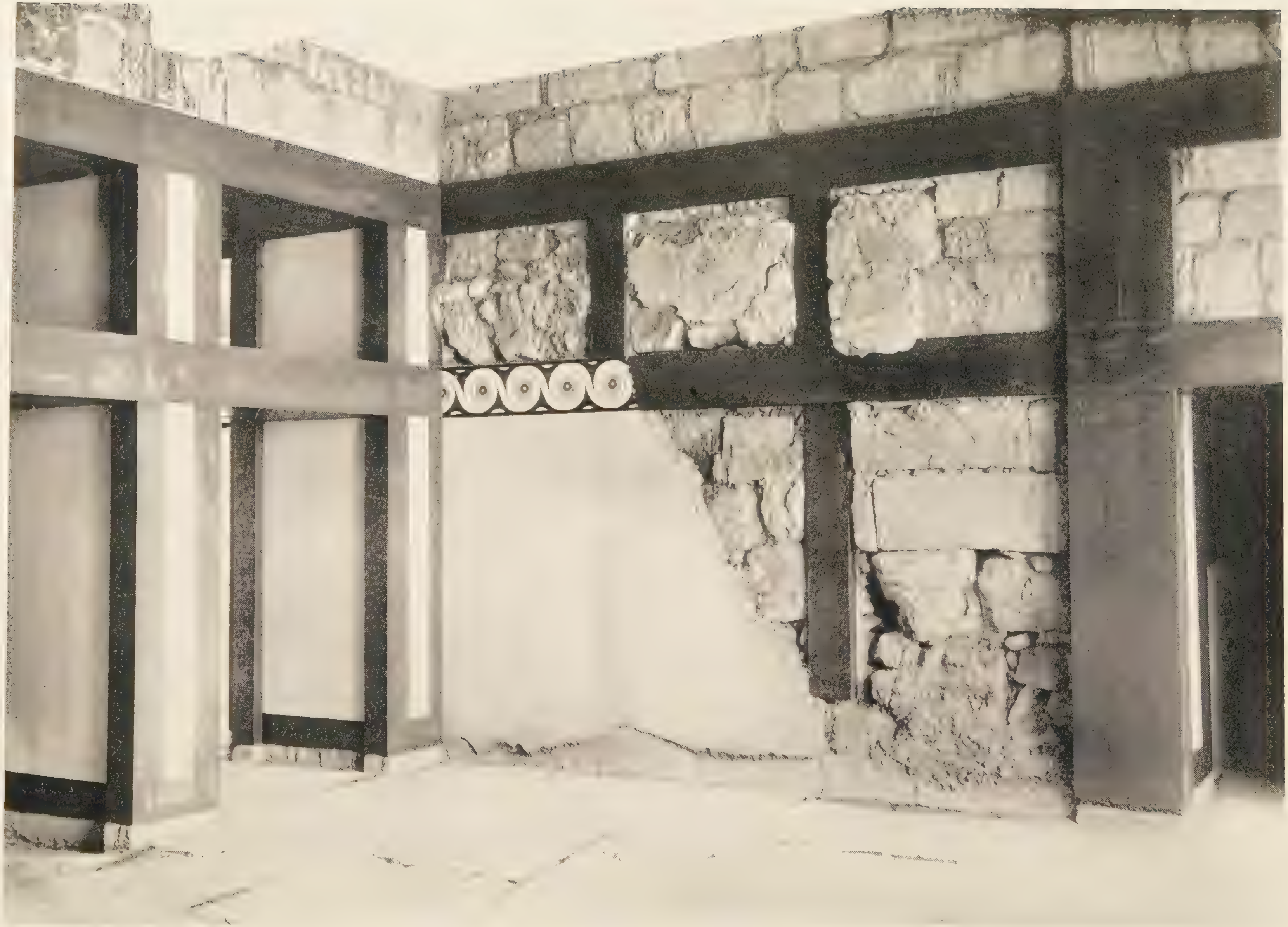

Fig. 221. View of South Side of 'Audience' Section of 'Hall of Double Axes' showing Entrance to 'Dog's Leg Corridor' to right.

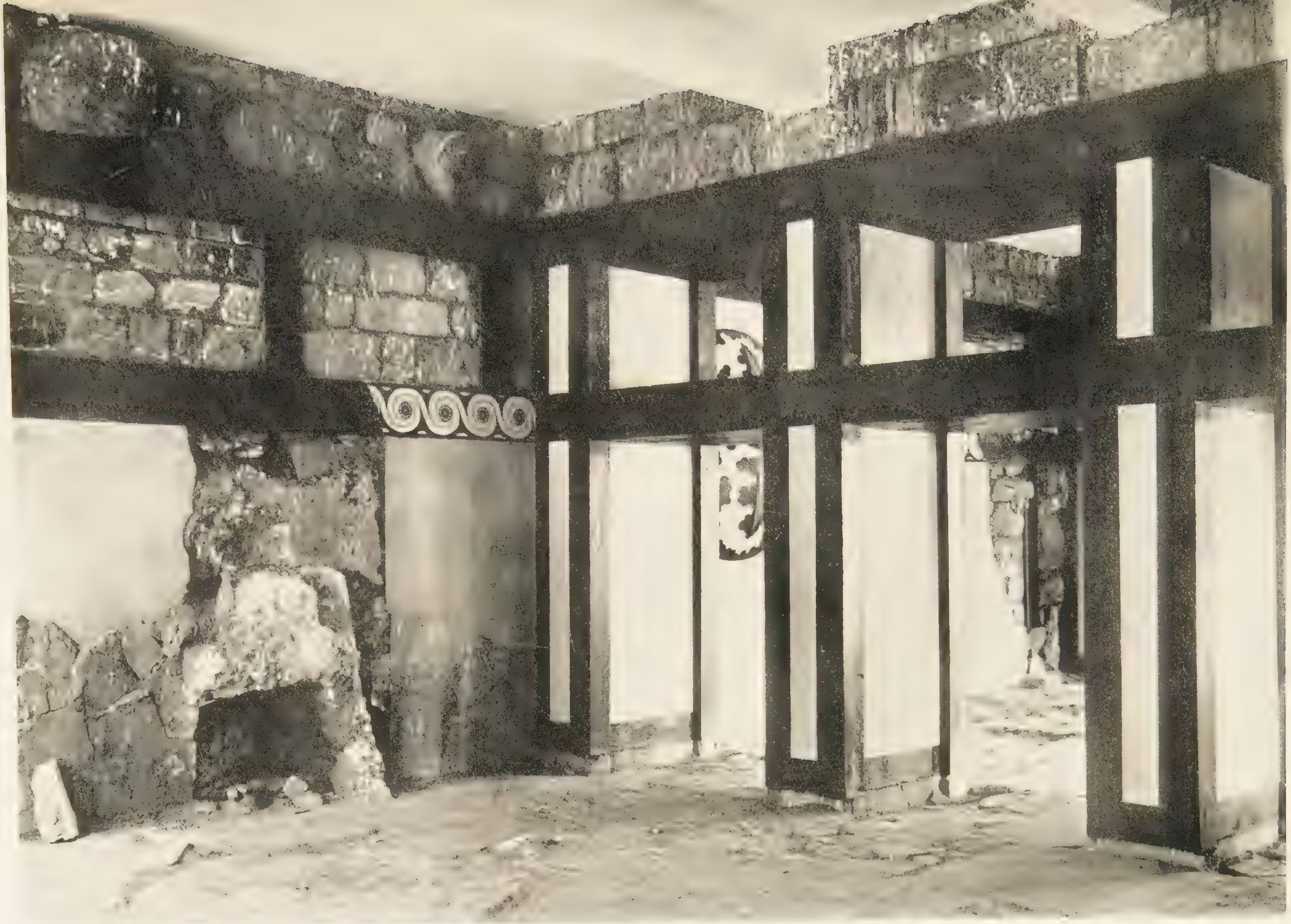

Fig. 222. View of 'Audience' Section of 'Hall of Double Axes' looking North-East and showing Plaster Mass, with Impress left by Throne and Canopy.

height of 1·10 metres. This is below the normal ratio of about five times the diameter of the base of the shaft, implying somewhat heavy shafts.[1]

To understand what had occurred it must be supposed that the lower portion of the back part of the wooden structure had fallen away, leaving half the bases of the wooden shafts resting on the ends of the projecting wooden arms, and these bases, though since disintegrated, have left their fluted impressions on the plaster accumulation. (See Fig. 223.) General support for this part of the wooden framework would have been given by the plaster mass below.

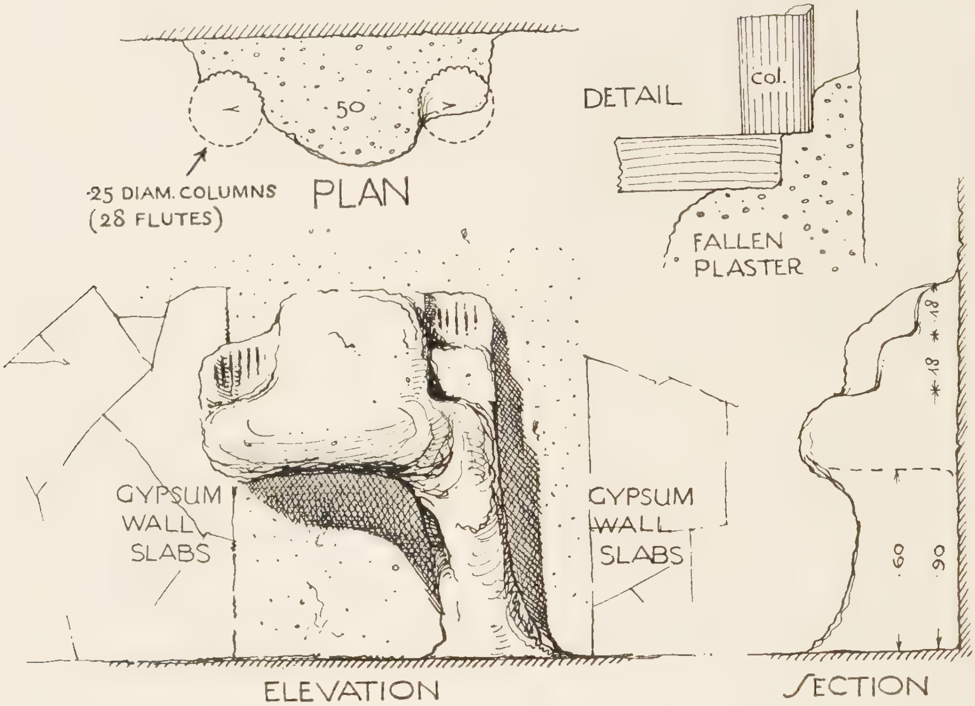
·50
·25 DIAM. COLUMNS
(28 FLUTES)
PLAN
DETAIL
Col.
FALLEN
PLASTER
GYPSUM
WALL
SLABS
GYPSUM
WALL
SLABS
·18
·18
·60
·90
ELEVATION
SECTION

Fig. 223. Elevation, Plan, and Section of Lime Plaster Mass showing Impress of Wooden Throne and Canopy.

The materials at our disposal warrant the conclusion that we have here the remains of a wooden canopy with four fluted columns as shown in Mr. Piet de Jong's restored drawing, Fig. 224. It stood against the wall between two slabs of the gypsum dado and including a low base—here reckoned as 10 centimetres[2]—rising to a total height of about 2·30 metres so that the architrave of the columns corresponded with the line of the painted stucco band above the dado. We may further assume that the carved ornamentation of the woodwork here was in keeping with the spiraliform design of the fresco band. The wood carving itself, as in other cases, may have been covered with gold foil.

---

[1] The lower column of the 'Stepped Portico' in the West Quarter had a base of about 1·15 m. diameter with an estimated height of only 4·72 metres.

[2] The height of that in the 'Room of the Throne' in the West Quarter.

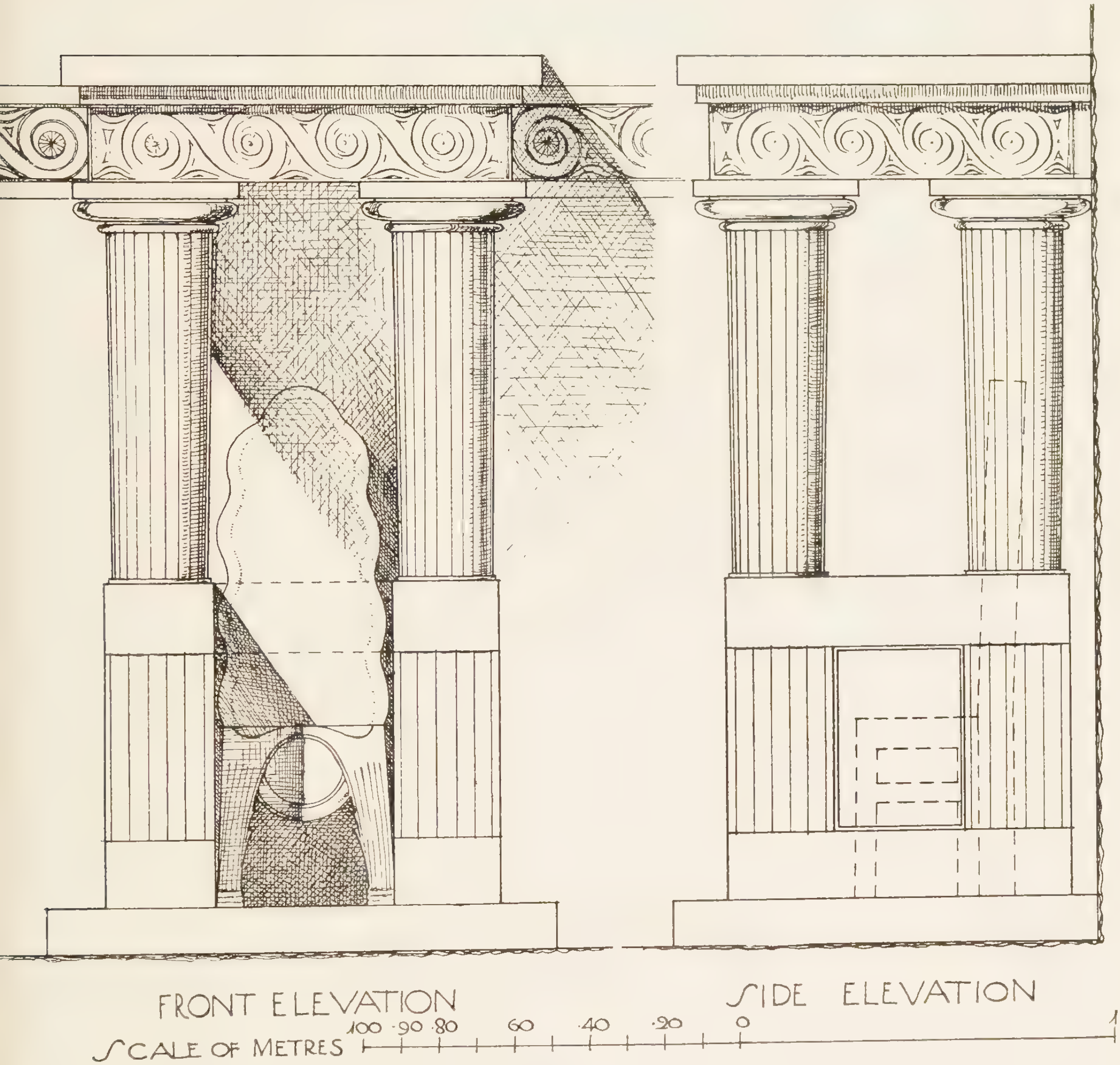

Fig. 224. Restored Drawing of Wooden Throne and Canopy in 'Audience Section' of the 'Hall of the Double Axes'. (Piet de Jong.)

That, like the painted frieze, the canopy, in the shape of which we have here a record, belonged to a later epoch than the gypsum dadoes is indicated by an interesting circumstance. The gypsum dado slab that had originally filled the centre of the wall between two other similar slabs had been broken away to the level of the pavement and the plaster facing had been substituted for it, since no doubt it had been found easier to fix the wooden framework against this. We may therefore legitimately refer the construction of both throne and canopy as they existed in the last Age of the Palace to the same epoch of restoration as the painted band, belonging, as has been shown, to the close of the mature L. M. I *a* phase.

Traces of wooden throne beneath canopy.

Such a canopy could only have been designed to enshrine a throne, and, indeed, the plaster mass has preserved its traces. The clear outline of the lower part of the seat is visible, as indeed may be seen from the photographic view, Fig. 222.

The width between the supporting parts of the canopy, according to the simple form of reconstruction proposed, was about 50 centimetres,[1] a width that exactly corresponds with that of the gypsum throne in the basement chamber of the West Quarter, to which it has given its name, and we may therefore conclude that a similar throne in woodwork was set in the intervening space. Whether it presented the same details in its decoration or was provided in the same way with a leaf-shaped back it is impossible to say. If, as seems probable, the canopy itself formed a fixture of the scheme of redecoration to which the painted spiral frieze itself belongs, it must have been of mature L. M. I *a* fabric and somewhat earlier, therefore, in date than that of the 'Room of the Throne'. But, when the fact is borne in mind that this L. M. II throne shows every sign of having been copied from an original in woodwork, the slight priority in date of the present example cannot count for much. In any case, as supplying what was probably a very close parallel, the gypsum throne has been here taken as the model for that, *ex hypothesi*, placed beneath the canopy.

The 'Inner Hall'; Lines of Doorways and Light Openings.

Inner section of Hall.

From the 'Audience' section of the 'Hall of the Double Axes' a line of four doorways led to what has been termed above the 'Inner Hall', which, again, was approached in a similar fashion from the Eastern and Southern Porticoes of the 'Exterior' section of the Hall. An instructive view of the three sections of the North side of the Hall showing column-bases of the two porticoes and the two intervening lines of doorways is given in Fig. 225.[2]

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[1] The width between the columns themselves, as approximately fixed by the existing remains, was 50 centimetres.

[2] The fuller view of the Hall from which Fig. 222 and Fig. 225 are taken is given in the folding Plate G in the pocket at the end of this Volume.

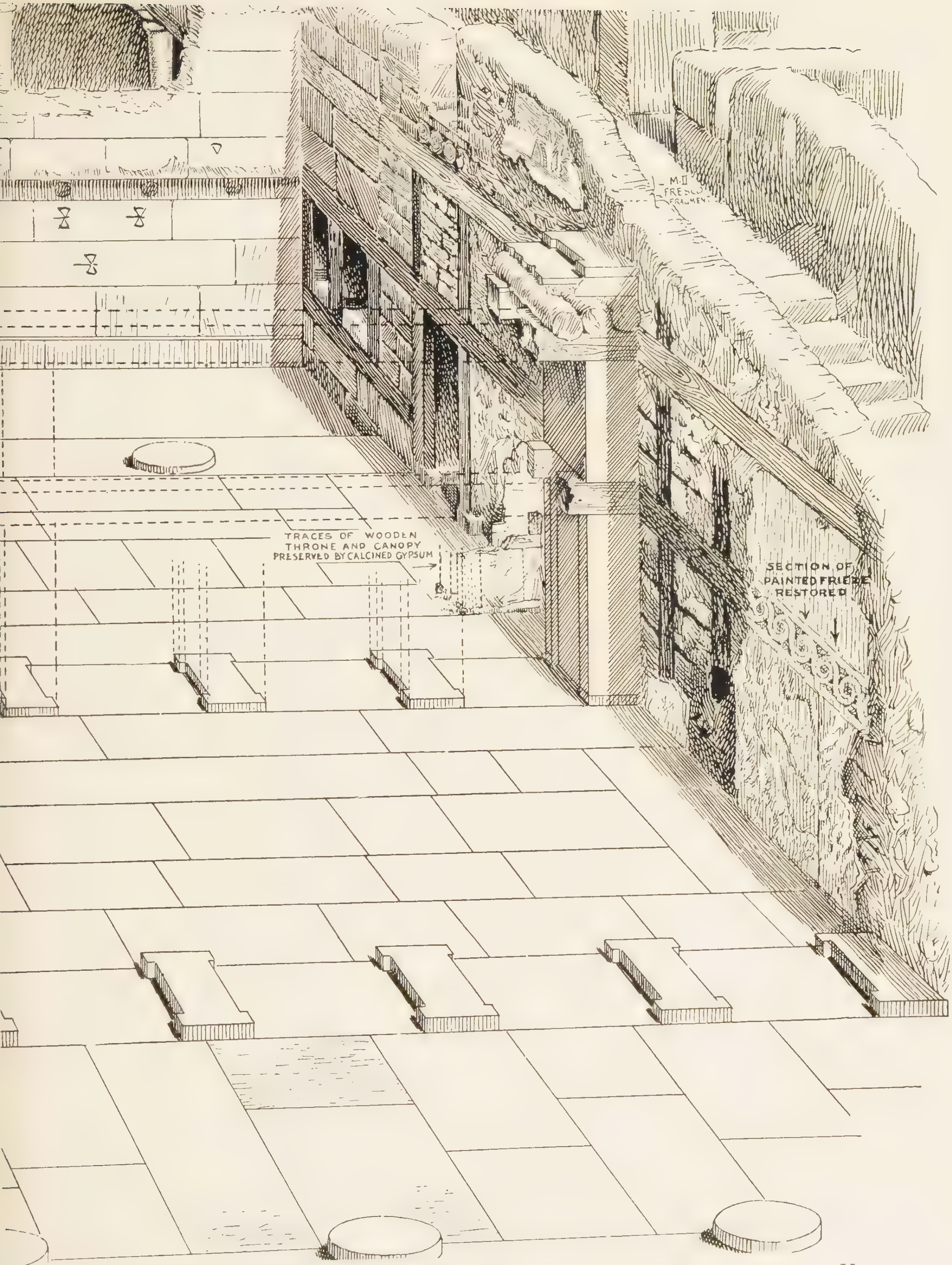
M.II FRESCO FRAGMENT
TRACES OF WOODEN THRONE AND CANOPY PRESERVED BY CALCINED GYPSUM
SECTION OF PAINTED FRIEZE RESTORED

Fig. 225. View of Part of the North Side of 'Hall of the Double Axes' with Upper Structures temporarily removed and Woodwork partially restored.

The timbering of the walls has been here partly restored and the pillars and the upper structures temporarily removed. A glimpse of a corner of the 'Hall of the Colonnades' is seen beyond through a gap in the farther wall of the Western light-well. The wall itself shows the incised double-axe signs, and the place of the throne and canopy is indicated in the 'Audience' section.

The system of separating sections of halls by rows of door-jambs is peculiarly Minoan, and good examples of it have already been given in the case of the 'Great Megaron' of the Little Palace[1] and of other, smaller, private houses. The 'Megaron' referred to, approached by a magnificent entrance suite, resembled the exterior section of the 'Hall of the Double Axes' in that it presented lines of doorways facing outer porticoes on two sides.

Door-jambs as piers between sections.

These rows of door-openings formed in themselves a remarkable architectural expedient. By their means an area of a hall or living-room could be left wholly or partially closed or entirely open, the narrow piers of the doorways at the same time answering to the structural need of architraves supporting wide spaces.

Elasticity of system.

In the case of large halls used for similar purposes, whether Old Chaldaean, Egyptian, Classical, or of later date, the supporting function was assigned to columns or separate piers, an arrangement followed at Knossos itself for more public halls, such as those with three or more columns in the West Quarter of the Palace and in the 'Northern Pillar Hall'. The architectural unity was, no doubt, better brought out by the columnar arrangement. But the Minoan system, with its elasticity of adjustment, was much better adapted for domestic convenience. By closing the lines of double doorways complete seclusion could be attained, and if, as we may suppose, there was also some means of shutting the window-like openings above, a whole section could be protected against the winter cold or the excessive summer heat. Infinite gradations might indeed be secured in regulating both temperature and ventilation.

Two-leaved door-ways.

Three of the Eastern line of door-jambs in the 'Hall of the Double Axes' are reproduced in Fig. 226, looking North.[2] In a series of cases it has been possible, as has been already noted, to trace the semicircular grooves on the threshold slabs, produced by the swing of the doors. In the 'Hall of the Double Axes' all the jambs are provided with double reveals.[1] In these cases the two leaves of the double doors fitted neatly into the recess between the reveals of the jambs, so that when they were shut a free passage was opened, as between oblong pillars.

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[1] *P. of M.*, ii, Pt. II, p. 517 and Plan, Fig. 318.

[2] Neither in this case nor in that of the better preserved line of doorways to the West of this was it possible to preserve in position the wooden posts and cross-beams of the piers above the jambs, the carbonized remains of which soon became disintegrated. In the latter case, however, a good deal of the upper stonework, together with a series of gypsum pavement slabs, as well as most of the jambs of the floor above, could be replaced at their original level.

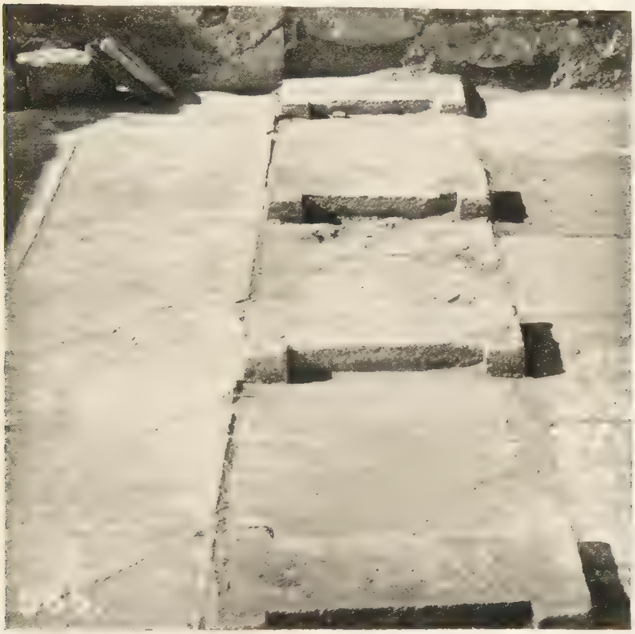

FIG. 226. VIEW OF DOOR-JAMBS WITH DOUBLE REVEALS, 'HALL OF THE DOUBLE AXES', BETWEEN CENTRAL AND EASTERN SECTION.

Window-like openings above doorways.

A characteristic feature of these Minoan doorways was the square timbered space above their massive wooden lintels enclosed on the two sides by the upward continuation of the door-posts, and above by the beam that formed the main support of the floor above. This feature, which resembled a window both in form and function, was itself the logical outcome of the form of timbered construction prevalent in the Third Middle Minoan Period, and in the walls we see upright and transverse beams enclosing panels of masonry. That in some cases, as in the outer doors of the 'Hall of the Double Axes', leading to the Corridor on either side, the square space above the lintel was filled up in a similar way seems to be sufficiently ascertained. But there is equally good reason for believing that, above the lines of doorways between sections of a room or hall, these squares of timbering could be left open for the passage of light and air. They were, indeed, often the sole means of giving light to the interior of a chamber when the doors were shut. The inner section, for instance, of the Hall with which we are dealing would have been perfectly dark.

For outside doors such a system of obtaining light in a hall or passage, when the door is shut, is of course of universal occurrence, and is exemplified by our fan-lights. Very poor dwellings, in Sicily for instance, are to be found with no means of lighting except the square opening above the lintel, and since glass is still a luxury with their occupants, these are generally left either wholly open or are closed against the cold weather by a board. It is possible that some of the upper openings seen in the faïence House façades could be boarded up in this simple fashion. But, as can be seen from these, already in the Middle Period, the Minoan private houses were in other respects advanced far beyond the primitive stage. In the type reproduced in Fig. 227, where the characteristic wooden framework of the structure is well indicated, two paned windows—perhaps implying two casements—are shown above the pair of door openings. As in other cases, the panes of the windows are filled in on the tablet with a bright red, ochreous material, showing that they were originally coloured, and the suggestion seems natural that the translucent material thus tinted was oiled parchment. The windows themselves[1] have often four panes, and in one case we see an example consisting of two wings, each with three panes.

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[1] Compare Fig. 213, p. 320.

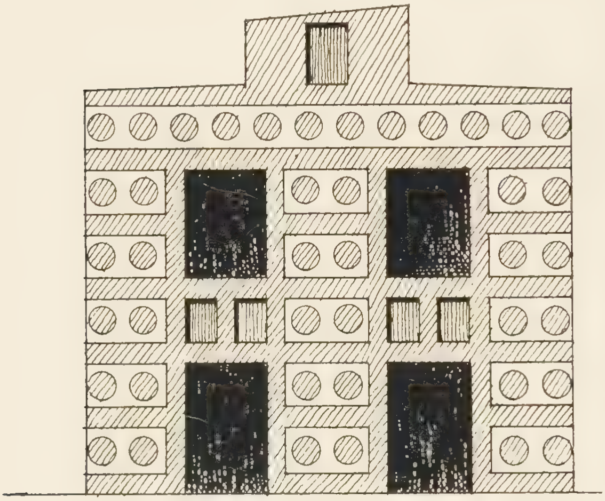

Fig. 227. House Façade of Faïence Tablet showing Windows above Doors.

Red-coloured panes: ? parchment.

In view of this evidence it seems probable that the lines of doorways, such as those facing the inner section of the 'Hall of the Double Axes' on three sides, were accompanied by windows above, opening in a similar manner within a wooden framework, the two casements of which were probably fitted with translucent panes of oiled parchment coloured red. The restored arrangement is shown in the Coloured Plate XXIV opposite p. 346. Since windows thus placed could not well have been opened and shut without the aid of a ladder, we may infer that their seasonal readjustment to meet changed weather conditions could not have been very frequent.

Inner Hall: capable of isolation.

This 'Inner Hall', with its screens of doorways that might be all closed, was capable, as we have seen, of being entirely isolated from its surroundings. Being of moderate size, moreover, it could be conveniently warmed during the chilly months of the year—which in this part of Crete extend from November to the beginning of April—by means of the clay chafing pans and movable hearths or braziers, of which so many remains were found throughout the Palace. Of fixed hearths, such as were usual under the colder climate of Mainland Greece, and which at Mycenae go back certainly within the limits of the M. M. III Period, there is here no trace. It is possible, moreover, that in this section of the Great Hall, which, when closed by the screen of doors was that best adapted for ease and comfort, the place of the seat of honour itself was not a fixture in the same way as in the adjoining 'Audience Chamber'. Its general position, so far as the scheme of arrangement went, must nevertheless have been against or near the wall on its Northern side that was its only solid boundary. As the gypsum throne found in the West Quarter was constructed in two parts, the seat proper, imitated from woodwork, and the back, we may perhaps suppose that there was here, rather, a movable wooden stool. (See Coloured Plate XXIV.)

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[1] *P. of M.*, i, p. 303 seqq., and Fig. 226.

Shields hung on Wall.

Spiral frieze above dadoes, like that of 'Shield Fresco'.

Along the base of the back wall of this inner compartment, as in the case of those of the other sections of the Hall, fragmentary remains were found of a painted spiral band that had originally covered the horizontal beam above the high gypsum dado (see sketch, Fig. 225).[1]

This spiraliform band (Fig. 229)[2] reflects the style and the general tone of the broader painted stucco frieze, of which remains are seen still attached to the wall in the bath-room of the neighbouring 'Queen's Megaron'. Though different in some details, it may also compare with that which traverses the 'Shield Fresco' in the *loggia* of the Grand Staircase. But, as already noted, the spiral band was alone represented in the Great Hall. Of painted shields we have here no trace. How, then, explain the absence of the most essential feature in the composition?

Presumption that real shields were hung along it.

The answer can hardly remain in doubt, and has, indeed, been already suggested.[3] There was no need here for the fresco copies, since the great body-shields themselves were suspended along the walls on the line of the spiral band. Along the North wall of the Inner Hall there would have

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[1] It looks as if the upper field of painted stucco had been deliberately torn down throughout a large part of the Hall preparatory to a scheme of redecoration, of which the heaps of plaster found on the floor bear evidence. In the piece of a fresco showing foliage and a bull's foot found attaching to the lower part of the wall of the Hall above (see Fig. 225) we may recognize a sample of this redecoration. Like numerous fragments found in the 'Lower East-West Corridor' it was executed in the L. M. II style characteristic of the last period of the building.

[2] From a drawing by Monsieur E. Gilliéron, fils.

[3] See above, p. 307.

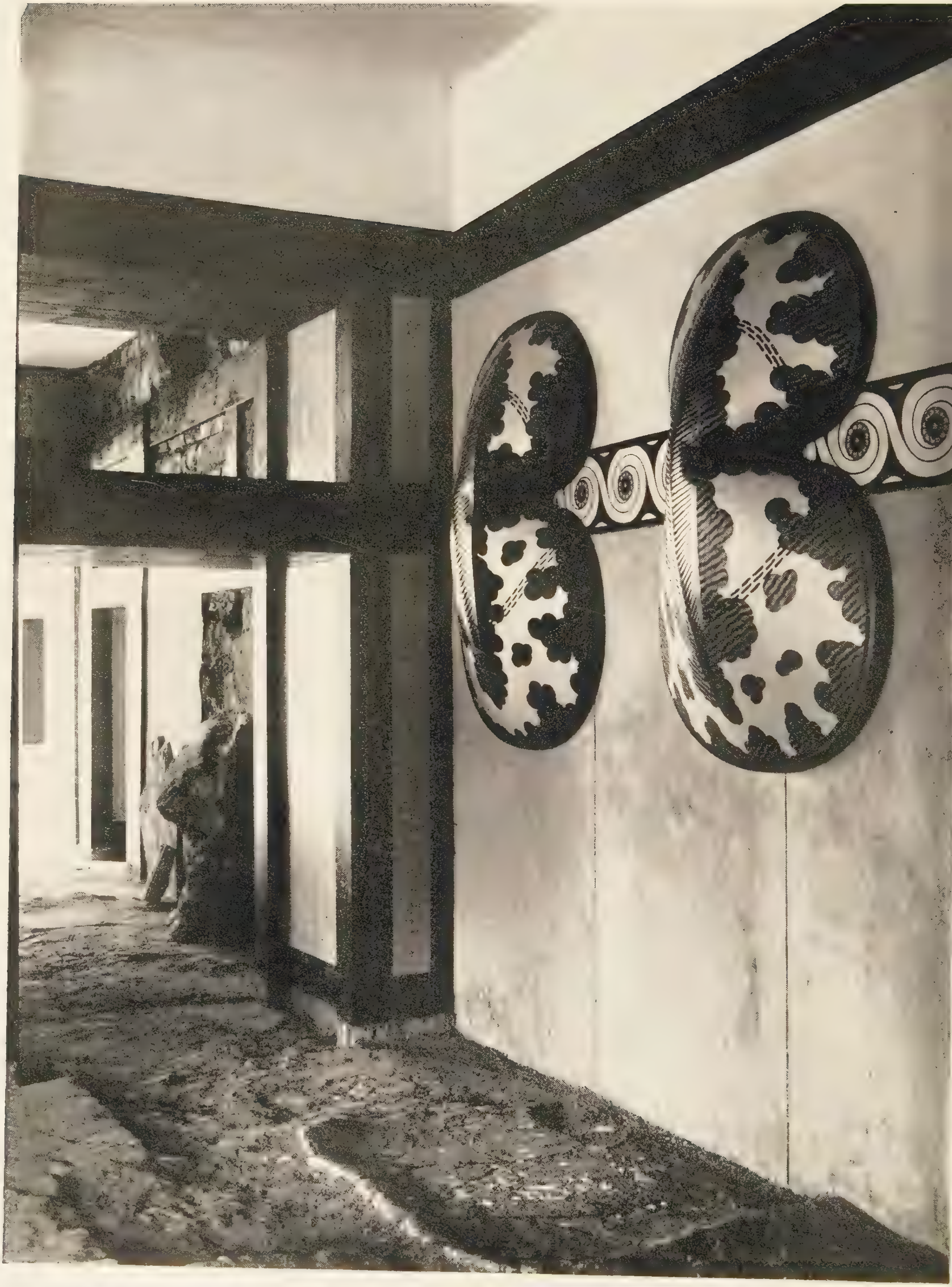

Fig. 228. Part of Interior of 'Hall of the Double Axes' showing Shields restored to Their Position on the Frieze.

been free space for four. On the wall behind the canopy of the throne one could have been hung on either side, and three more on the section opposite this. The remaining wall section of the 'Hall of the Double Axes' would together have accommodated another three, so that there may have been a dozen bucklers suspended in all.

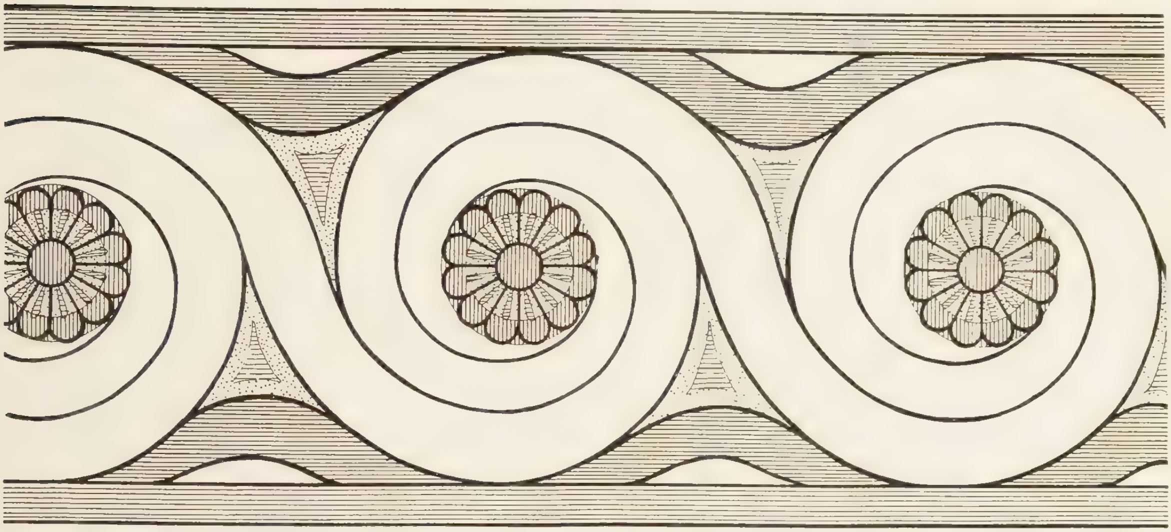

Fig. 229. Spiraliform Frieze with Rosettes above Dado of 'Hall of the Double Axes'.

Actual shields replaced in replica on wall.

In order to realize the effect produced, Monsieur E. Gilliéron, at my request, executed in painted zinc two actual copies of these great body-shields, answering in shape and dimensions,—together with the imitation of the spotted ox-hides,—to two of those depicted in the Fresco. The yellow of the elongated bosses was in this case translated into gold plating, reproduced by means of foil. These shields have been now suspended by means of pegs on the restored painted band, from which the originals had hung, as shown in Fig. 228.

Restored view of Inner Hall: the Chieftain at ease.

Some idea of the winter aspect of this, the most private section of the Great Hall, may be gathered from the Coloured Plate facing the next page. This has been artistically executed in accordance with my suggestions, and reproduces the effect of its splendid equipment of great body-shields suspended on the wall, as in the Megaron of Odysseus. Here the Minoan Lord is seen seated at ease on his stool in a very different fashion from that imposed by the fixed canopy in the 'Audience Chamber'. He warms his hands before a movable hearth, like those that have been found in a fragmentary state elsewhere in the Palace, the 'notched plume' decoration[1] of which, like that on the wings of Minoan griffins and sphinxes, was to be transferred to the fixed hearth of the Mycenae Megaron. The doors and windows of the partition on the left, through which access was gained to the Western section of the Hall, with its Portico open to the light-court on that side, are shown mostly closed to keep out the draught, but, apart from the openings, the light filters into the dark corner of the Hall through the red-stained parchment panes.

On the pavement, by the seated figure, is his gold-plated casque and 'horned', gold-mounted sword, while spears rest against the corner of the chamber.

Religious side: indications of Double Axe cult.

There was, too, a religious side. On the face of it, the recurrence of the Double Axe sign on the blocks of the light-well beyond may be reasonably supposed—as in the parallel repetition of the symbol on the piers of sanctuary crypts—to have a certain significance as to the character of the Hall itself. That this was so, indeed, is strikingly corroborated by the discovery,[2] to be described below, of the stepped socket of a ritual Double Axe in the adjoining 'Queen's Megaron'. It is not without warrant, therefore, that on the pavement to the left of our illustration, there has been set a larger pyramidal socket of the same kind, from which, wreathed round with foliage like those of the Hagia Triada Sarcophagus,[3] rises the tall shaft of a similar baetylic weapon with broad blades, here shown gold-plated, resembling those stored in the Priest's House at Niru Khani.[4]

'Rhyton' for ritual libation.

By it is set, in a restored shape, another article of ritual furniture actually found on the South side of this Section of the Hall—namely, a tall 'rhyton' of richly variegated breccia with black, grey, and porphyry-like veins. This vessel, of which the upper circuit of the body, with its fine fluting and the spring of the neck with a round boldly relieved collar, has been preserved, (see Fig. 230), had originally attained a height of about half a metre. It is of characteristic M. M. III fabric, but may well have remained an heirloom to the last days of the Palace, like the analogous 'rhytons' of breccia and white 'marble' found in the Treasury of the Central Sanctuary in the West Quarter of the building.[5]

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[1] *P. of M.*, i, p. 548 seqq.

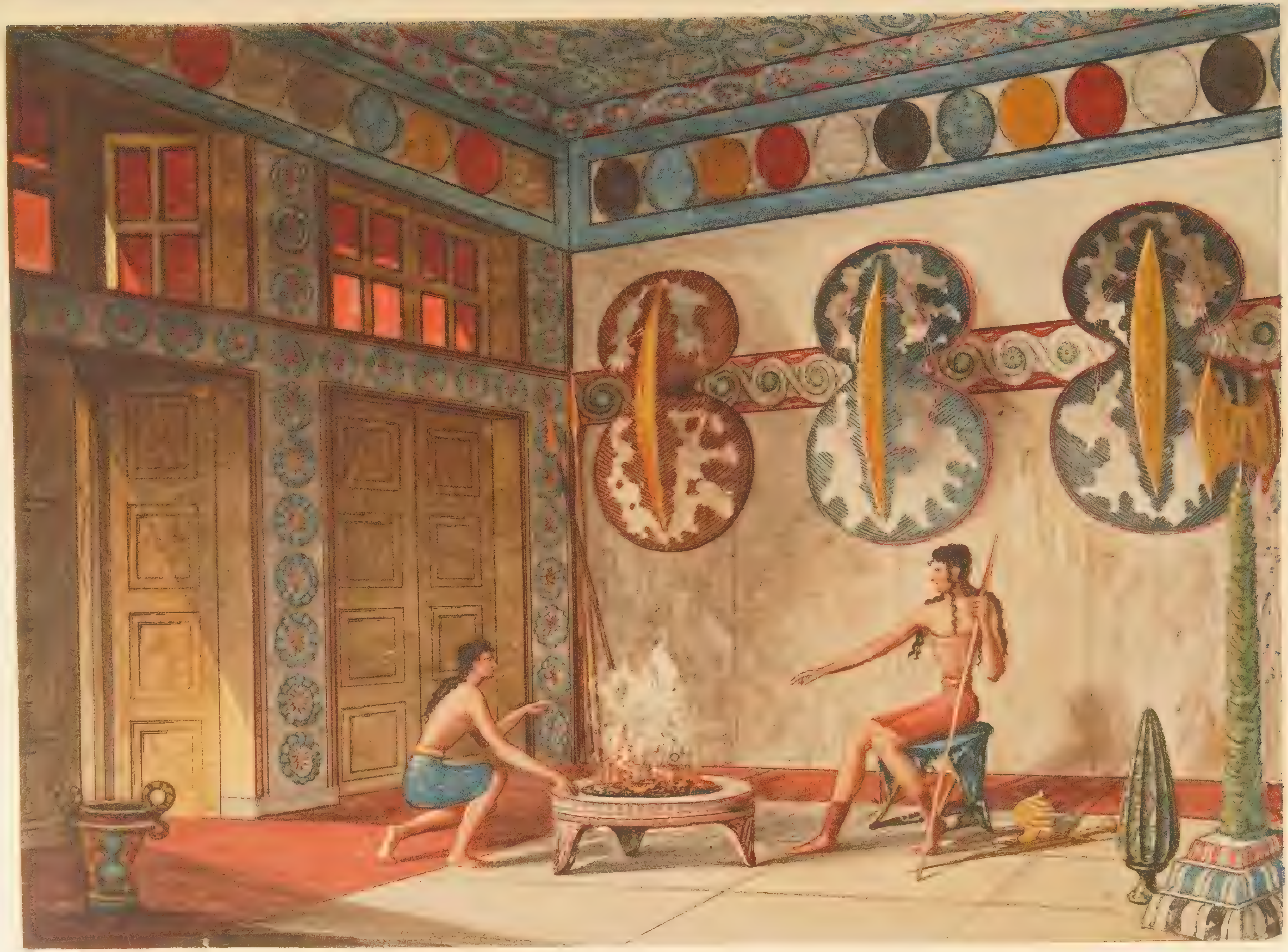
[2] See below, p. 369.

[3] *Ibid.*, p. 440, Fig. 317.

[4] *Ibid.*, pp. 436, 437 and Fig. 313.

[5] *Ibid.*, ii, Pt. II, p. 822, and cf. Pt. I, p. 225, Fig. 129, 17 and 18, where the 'rhyton' No. 17 of marble-like limestone may be taken to represent a slightly later and more elaborate example, of a similar fluted and collared type. The latter recalls in its 'collar' and pear-shaped outline a L. M. I *b* painted 'rhyton' from Pseira (No. 15).

PLATE XXIV



RESTORED INTERIOR VIEW OF INNER SECTION OF 'HALL OF DOUBLE AXES' SHOWING SUSPENDED SHIELDS.

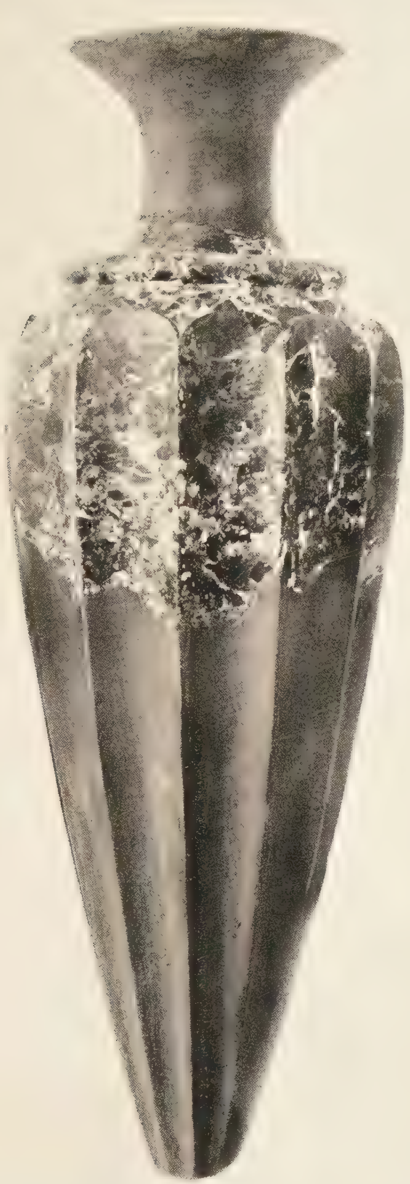


FIG. 230. 'RHYTON' OF VARIEGATED BRECCIA RESTORED: FROM 'HALL OF THE DOUBLE AXES'. HEIGHT 49 CM.

On the pavement to the left of the Chamber is depicted a contemporary L. M. I *a* vessel[1]—also in all probability used for ritual libation[2]—of a type that has such a close relation to the spiral frieze and suspended shields of the Hall itself, that it might almost be supposed to have been made for use within it. It has already been illustrated in relation to the 'Shield Fresco' of the Loggia on the Stairs, and is adorned in a remarkable polychrome style with an eight-shaped shield on one side and a peaked Minoan helmet on the other, with spiraliform designs on the background.[3]

Clay fire-box.

An association of another kind was also supplied by the discovery on the neighbouring wall among sherds of transitional M. M. III to L. M. I date, of fragmentary remains of a clay 'fire-box', of a type that recurs at Knossos and other Minoan sites on floor-levels of this epoch. These, as shown by the section, Fig. 231,[4] of a complete specimen, had a perforated 'fire-box' with a hole below for the insertion of the charcoal, which could be afterwards stopped.

Minoan domestic cult.

The occurrence of the Double Axe stand in the 'Queen's Megaron', like the discovery of the ritual vases decorated with Double Axes, as well as of the inscribed Libation Table and other cult objects in the 'House of the Frescoes',[1] together with a series of parallel finds, sufficiently shows that the worship of the great Minoan divinity was by no means confined to the formally designed columnar shrines or pillar crypts. It was a worship that entered into the household of private citizens as well as of princes, and even, as we have seen, into the house of Death.[2] In the inner compartment of the great Hall of the 'Domestic Quarter' at Knossos, even apart from the special indications that we possess, it could be certainly presumed that there were the same facilities for securing at all times the actual presence of the tutelary Goddess. It was, as we know from the painted sarcophagus of Hagia Triada,[3] through ritual libation—there indeed of a more wholesale kind and accompanied by the strains of the lyre—that the divinity itself could be prevailed on to descend in bird form on to its sacred symbols. Like the baetylic columns of the earlier Terra-cotta Shrine[4] found in the adjoining area, with the doves of the Minoan Goddess in her celestial aspect perched upon them, the Double Axes could themselves be 'possessed' by the divinity. In that case, as on other occasions, the strains of incantation were provided by conch-shell trumpets.[5]

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[1] From example found in Tomb IV, Isopata.

[2] Its shape with the two-looped handles answers to that of a ritual vessel from the Tomb of the 'Double Axes' at Isopata (*Archaeologia*, lxv, p. 51, Fig. 69) except that the latter has a domed top.

[3] See above, p. 310, and Fig. 198, *a*, *b*.

[4] This example is taken from *Phylakopi*,

Baetylic cult of Double Axes.

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p. 211, Fig. 188. It is of the normal Minoan form. As Mr. C. C. Edgar observes (*loc. cit.*), certain types of these objects may have had a culinary use.

[1] *P. of M.*, ii, Pt. II, p. 437 seqq.

[2] A. E., *The Tomb of the Double Axes* (*Archaeologia*, lxv), p. 33 seqq.

[3] R. Paribeni, *Il Sarcophago dipinto di Haghia Triada* (*Mon. Ant.*, ix), pp. 5–86 and Pl. I. (Cf. *P. of M.*, i, pp. 440, 441, and Fig. 317.)

[4] *P. of M.*, i, p. 219 seqq. and Fig. 166, F.

[5] *Ibid.*, p. 222, Figs. 167, 168.

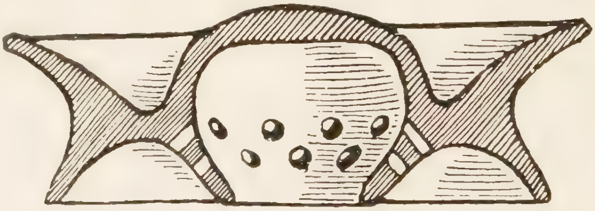

FIG. 231. SECTION OF CLAY 'FIRE-BOX'. (PHYLAKOPI.)

§ 84. The ‘Queen's Megaron’ as reconstituted.

How far were sexes segregated in Palace? Epic tradition; Isolated Halls at Tiryns, and Mycenae; More open system at Knossos—movable hearths; Yet certain elements in common with Mainland plan; Notched plume decoration of Knossian hearths on that of Mycenae; Analogy supplied by relation of two Halls at Tiryns; The ‘Dog's-leg Corridor’; Double Compartments of ‘Queen's Megaron’; Private staircase and upper ‘Thalamos’; Pillared Stylobates of ‘Queen's Megaron’; Bi-columnar Portico and Eastern Light-area; Evidences of wind erosion; Data for earlier history of Megaron; Successive pavements and levels; ‘Mosaiko’ pavement below Gypsum slabbing; ‘Kalderim’ pavement below this; ‘Mosaiko’ system M. M. II b*—its original extension; Other evidences of M. M. II* b *date of ‘Mosaiko’ pavements; ‘Nature-printed’ fresco with sponges associated with ‘Mosaiko’ system; Ceramic parallels to process; Printed sponges a stage towards later ‘Marine style’; Red gypsum border of ‘Marine’ panel; Gypsum pavement answers to later structures; Underlying stratum M. M. III* a *in East section of Megaron; In inner section L. M. I* a *sherds predominate; Pillared stylobate connected with M. M. III paving; Wooden benches along stylobates; Double Axe socket found by Central Stylobate; Fresco of Dancing Lady; Painted stucco relief with papyrus pattern—recalls ceiling decoration of Orchomenos; Parallels from Tirynthian friezes; Fits in with L. M. I redecoration; South Light-area—M. M. II walls; Incidence of light; Eastern Light-area—successive walls; Reoccupation wall; Remains of ‘Dolphin Fresco’; Overlapping of decorative systems; Painted stucco on Light-well wall; Section of ‘Dolphin Fresco’ reconstituted; Painted clay tub; Bath-room of ‘Queen's Megaron’—remains of spiral frieze; Painted clay bath—L. M. II reed decoration; M. M. III bath compared; Water transport by hand labour; Back passage with spiral band; Toilette Room and Latrine; Plaster dais; Great stone water-shafts in wall—possible cistern; Exceptional conveniences of ‘Queen's Megaron’—ideal interior view; Holes in pavement slab for game—Parallels from Mallia and Gournià; Miniature Fresco showing boys playing pavement game.*

How far were sexes segregated in Palace?

In assigning separate apartments to the two sexes, and endeavouring to define the limits of the women's realm proper in the residential quarter of the Palace, much caution and many reserves are necessary. That, according to the Minoan arrangements, the two sexes were to a certain degree segregated is clearly shown by the 'Miniature Frescoes' illustrated above, where the front seats are reserved for the ladies, and special standing room is set apart for others on the platforms supplied by the intervening piers. As a warning, however, against drawing too sweeping conclusions from the separate and privileged accommodation thus accorded to the female sex, we are confronted with the appearance of women mixing in small groups with crowds of men in the 'pit' below.

Epic tradition.

On the other hand, epic tradition—which in many ways reflects so accurately the features of Minoan life—has pictured for us, in detail, palatial dwellings with separate quarters for women. In the case of the later Palace at Tiryns—which has preserved the simpler Mainland plan in its most complete shape—two more or less isolated halls of larger and smaller dimensions have been respectively identified as the Men's and Women's 'Megarons'.

Isolated halls at Tiryns with fixed hearths.

In the Mainland plan, owing to the greater winter cold, it had been necessary to adhere to the old indigenous usage of fixed hearths—a tradition, indeed, common to Neolithic Crete, where perhaps it never wholly died out.[1] Thanks, however, to the milder marine climate, these had been generally set aside under Southern influences in favour of portable heating appliances, such as movable hearths, braziers, and chafing pans. Even on the Mainland, Minoan traditions were still so strong that the most striking example of a fixed hearth preserved to us—that of the 'Megaron' at Mycenae—was decorated with the same sacral notched-plume border in painted stucco that was usual on the contemporary portable hearths of Knossos.[2] The fixed hearth itself—which must be sheltered from draughts—imposed certain structural limitations,[3] and resulted in a predilection for a well walled-in compartment at the inner end of the 'Megaron'—as at Tiryns and Mycenae—which itself may be regarded as a survival of the primitive 'but and ben' dwelling, of such wide Aegean distribution.

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[1] See *P. of M.*, ii, Pt. I, p. 18 seqq. and Fig. 8 B, 1, 2.

[2] *Ibid.*, i, pp. 550, 551, and cf. Figs. 401 A, 401 B. Fragments of several painted tripod hearths of terra-cotta with this design (*ibid.*, p. 548, Fig. 399, *a*, *b*) were found in company with masses of M. M. III *b* pottery in the 'Kouloura' or refuse pit of the West Court. The notched plume is seen on votive arrows, on the wings of griffins, and on the flounces of the Goddess's robe. See, too, above, p. 346 and Coloured Plate XXIV.

[3] See on this Dr. D. Mackenzie, *Cretan Palaces* ii (*B. S. A.*, xii, p. 250 seqq.—*The Southern Connexions of the Mycenaean Central Hearth*). Dr. Mackenzie observes that the 'isolation of the Mycenaean Megaron, which brings it into seeming contrast with the Cretan type of hall, was structurally brought about through the introduction of the Central hearth; this follows from the mere fact that such an arrangement of hearth, if lateral draughts and consequent smoke-currents are to be avoided, makes openings such as doors or windows impossible on any side but one'.

More open system at Knossos: movable hearths.

Clearly, if this fixed form of hearth was to be adhered to, such a hall as that of the 'Double Axes', with its rows of doorways and triple porticoes opening into inner courts, was quite unthinkable.

Yet certain elements common with Mainland plan.

In spite, however, of the divergence in this respect from the architectural model supplied by the great Cretan Palace, we are yet entitled to trace in the simpler arrangements visible at Tiryns regarding the segregation of the men's and women's apartments, a real parallel to that presented by the 'Domestic Quarter' at Knossos. There is, indeed, a much greater fundamental community between the Mycenaean and the Minoan plans than archaeologists—affected by a kind of 'Helladic' mirage—have hitherto been willing to admit. The characteristic four-square hall itself with its four columns, though it found its proper place in connexion with a fixed central hearth under the Continental climatic conditions rife both East and West of the Aegean island world, is itself a recurring feature of Minoan domestic construction.[1] The 'Vestibule' of the 'Men's Megaron' at Tiryns, with its three doorways leading into a bi-columnar portico opening in turn on a court, is framed strictly after the analogy of the Western sections of the 'Hall of the Double Axes'. The Tiryns Court, indeed, is much more than a mere 'light-well', but, with its surrounding porticoes, it finds a very close parallel in the Central Courts at Phaestos and Mallia, and perhaps, if it could now be completed, that of Knossos itself. At Mycenae, on the other hand, the smaller Court outside the Megaron finds its natural suggestion in a Minoan 'light-well', so much so that in restoring its elevation the Knossian 'Hall of the Colonnades' has served in part as a model. The absolute correspondence in details of these Mainland halls strikes the eye. The ornament of the fixed hearth of Mycenae is a religious motive taken over from the movable hearths of Knossos. The frieze with its kyanos inlays found in the vestibule of the 'Men's Megaron' at Tiryns is not only of Cretan material, but is itself the decorative outcome of the half-rosette and triglyph friezes in vogue in our Palace in the immediately preceding age. The fresco design of the bull and female acrobat is a poor copy from the same source, and the great 'Shield Fresco' of Knossos was artistically adopted at Tiryns on a smaller scale, even to the reproduction of similar colour effects.

'Notched plumes' of Knossian hearths on that of Mycenae.

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[1] A good example of this has been given in the Plan of 'House B' at Palaikastro, where the Megaron (*b*) shows four column-bases arranged in a square (*P. of M.*, ii, Pl. II, p. 568, Fig. 354; see *B. S. A.*, *Suppl. Paper*, 1923, Pt. i). The arrangement in this case seems to point to a clerestory above. As a matter of fact the pavement here shows a square opening pointing to a more or less open area. The hearth here, though it may have been movable, clearly had a fixed place.

Analogy supplied by relation of two halls at Tiryns.

Mutatis mutandis, the relation of the 'Men's Megaron' at Tiryns to the smaller 'Megaron' attributed to the women supplies a very near analogy to that in which the 'Hall of the Double Axes' stands to the neighbouring 'Queen's Megaron'. When, moreover, it is remembered that in the case of the Tiryns 'Megaron' the existing plans are largely based on the substructures of walls, and that door openings may have existed in places where they have not been recognized, the possibility remains open that the parallel was still closer than appears from the Plan, Fig. 232, here reproduced for comparison,[1] and that the connexion between the two Tirynthian halls, if still by a roundabout route, was somewhat more direct than is there

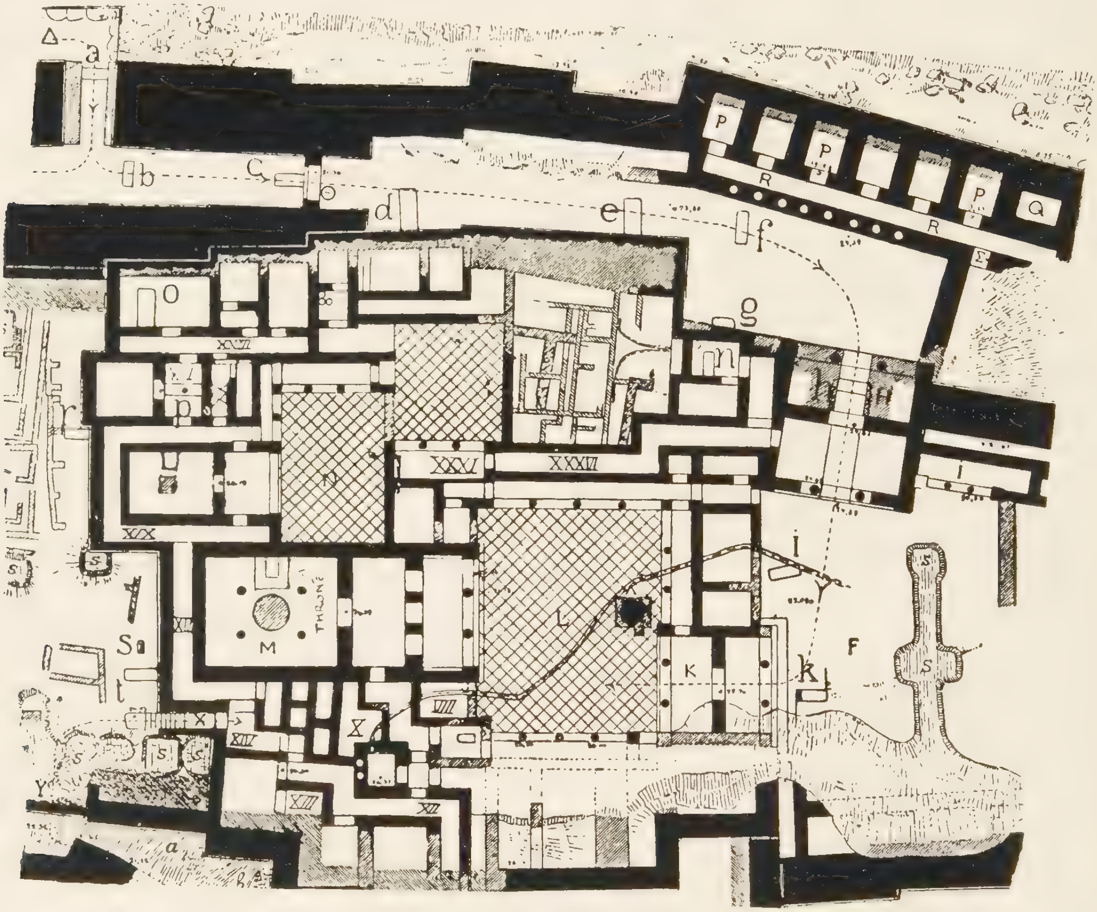

Fig. 232. Plan showing Part of the Later Akropolis (L. M. III) at Tiryns with Propyla and Palace Halls.

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[1] From G. Rodenwaldt, *Tiryns*, ii, p. 2, *Oberburg von Tiryns*.

shown. This tortuous passage-way finds its analogy in the 'Dog's-leg Corridor' at Knossos, described below.

'The Dog's-Leg Corridor.'

It has been noted above that an open gangway led from the West end of the Southern light-area of the 'Hall of the Double Axes' to a door on the left, giving access to two small back chambers—perhaps for attendants—the farther of which was in communication both with the portico of the 'Queen's Megaron' and the area that lighted its inner compartment.

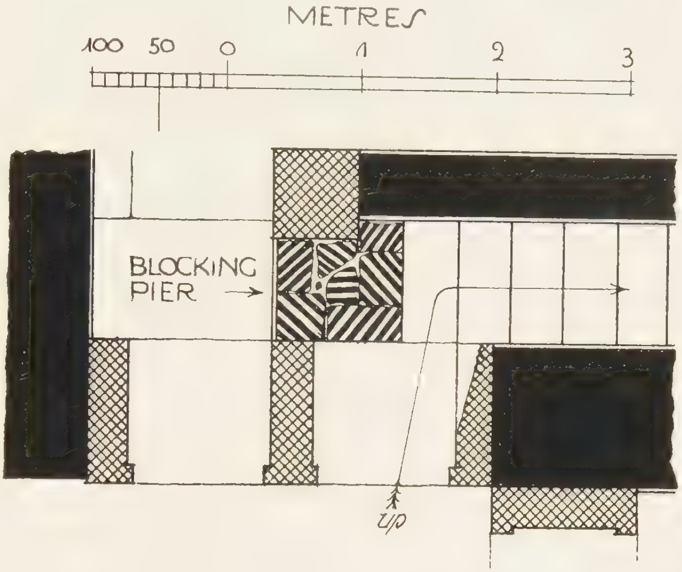

Fig. 233. Plan of Entrance to Private Staircase from 'Queen's Megaron' showing Later Pier inserted for Support of Upper Structures.

This strictly controlled and distinctly circuitous route — intercepted thus by closed chambers—was supplemented by what was no doubt the main line of access, that, namely, to which admittance was obtained by the Southern doorway of the 'Audience Chamber' of the greater Hall, immediately opposite that leading into it from the 'Lower East-West Corridor'. From the double bend of the short passage thus entered it has been known from the time of the excavation as the 'Dog's-leg Corridor'. It was evident that the double turn, with its doors at either end, greatly enhanced the privacy of the room beyond. Some of its gypsum dado slabs, as also those with which it was paved, were in a singularly good state of preservation; tests made below the paving, however, produced no sherds later than M. M. III,[1] and its construction may therefore be regarded as contemporary with that of the 'Hall of Double Axes'.

Though short, the crooked passage-way must always have been decidedly dark, and the contrast is the more agreeable, when, on reaching its left turn, there opens the view of the smaller hall,—now reconstituted,—known as the 'Queen's Megaron', with its brilliant colouring set off by the abundant lighting.

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[1] 1913.

The 'Queen's Megaron'.

Double compartments of 'Queen's Megaron'.

This chamber, the Western Section of which was thus entered, was divided into two compartments by a pillared stylobate with a doorway on its Northern extremity which opened into the covered area of a portico with a small light-court beyond. At the same time a similar pillared stylobate, entirely shutting the South side of this Western section, opened on a narrower light-area beyond. These arrangements secured not only a good supply of fresh air, but a diffused, reflected light, much of the original effect of which has been recovered by the reconstitution of the upper structures. It will be seen that it would have been as easy here completely to close in the inner compartment of the Megaron by means of a row of doorways that could be left open or shut, as it was in the case of the neighbouring 'Hall of the Double Axes'. But perfect seclusion when needed was here secured in another way by a private staircase that led from a doorway placed beside that of the 'Dog's-leg Corridor', and communicated above with a chamber already referred to, overlying the inner compartment of the Megaron. In the last Age of the Palace the entrance to this staircase—originally only separated from that of the 'Dog's-leg Corridor' by a thin partition—was partly blocked by a pier of masonry, evidently inserted to give additional security to the upper flights of stairs. (See Plan, Fig. 233, and Photographic View, Fig. 234.) Indications of a similar makeshift device were noticed between the columns of the first flight of the Grand Staircase. Of the piers themselves there were only disjointed remains, but

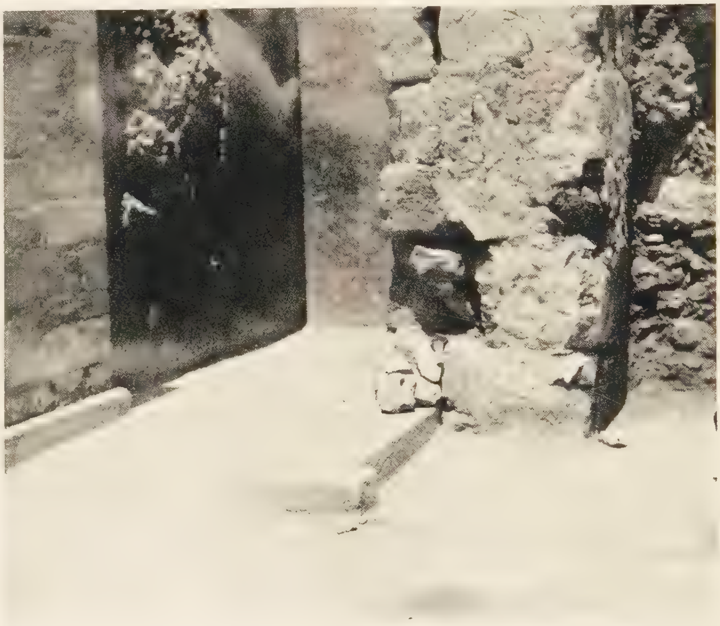

Fig. 234. View of Door-jambs opening from 'Queen's Megaron' to Private Staircase, showing Remains of Later Supporting Pier. To left, Entrance to 'Dog's-leg Corridor'.

Private staircase and upper 'Thalamos'.

Supplementary piers for support of upper structures.

the coping slabs between the columns of the lowest flight of stairs had been removed to make place for them.

In these precautionary works the fear of some fresh seismic catastrophe makes itself clearly visible.

The anterior section of the 'Thalamos' to which the staircase led formed a verandah with a balustrade overlooking the little light-court on the East side, and we may suppose that its inner section was provided with window openings of the ordinary kind, from which, owing to the comparative lowness of the wall[1] on the East side of this little room, it would have had a view of the hill-top opposite. The verandah itself at the same time would have supplied passage-way to two small chambers on the South, answering to the two below, which may well have served as bedrooms. The floor of an inner compartment, opening into the interior section of the 'Thalamos', had been partly preserved *in situ*,[2] answering to that of the bath-room below, and doubtless serving the same purpose. (See Plan, Fig. 266, below.)

Pillared stylobates of 'Queen's Megaron'.

Of the 'Queen's Megaron' itself the most conspicuous feature was supplied by the two lines of narrow pillars set, in the case of each series, on a gypsum stylobate, one of which divided the two sections, while the other flanked the interior space of the room, securing for it excellent lighting from the light-area that bordered it on its Southern side. These pillars, as will be seen from the Coloured Frontispiece, have been restored above with stepped cornices which were such a favourite Minoan finish.

Bi-columnar portico and E. light-area.

The doorway at the Northern end of this pillared stylobate opens into a portico with two columns, one of which is partly visible in Fig. 246. The adjoining wall of the light-area beyond shows a course of fine gypsum blocks resting on a limestone plinth, and in turn supporting other large blocks of gritty limestone. The outer limestone blocks seem for some considerable time to have been exposed—owing doubtless to the ruin of the other side of the area—to the full fury of the South wind and, as already noted,[3] illustrate the same form of wind denudation visible in the cliffs of the gorge above.

It was only owing to supplementary researches, interrupted by the Great

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[1] The wall, as built at the time of the Great Restoration, was only 70 centimetres thick, which indicates that it was comparatively low. It has been assumed that it was the same height as the balustrade of the opposite verandah.

[2] The old floor of this space was in fact re-used at a slightly higher level by later squatters of the Period of Reoccupation who used it as a store for stirrup vases and other vessels of L. M. III *b* type, several of which were found intact in the positions in which they had been placed.

[3] *P. of M.*, ii, Pt. II, pp. 814, 815, and Fig. 533. See above, pp. 292, 293, and Figs. 191, 192.

War, but finally carried to completion in 1929, that it has been possible at last to solve, in a certain measure, the difficult but highly interesting problems regarding the earlier architectural stages represented in the area of the 'Queen's Megaron'.

Lime deposit on floor for late restoration.

The preliminary excavation by which the gypsum pavement of the 'Megaron' was reached had itself been greatly impeded by the same obstruction that had been encountered over the floors of the neighbouring area to the North, including part of the 'Hall of the Double Axes', and the 'Lobby of the Wooden Posts'. Here, too, in view of a comprehensive scheme of restoration set on foot in the last days of the Palace, great masses of lime had been accumulated which everywhere formed a solid layer. The adjoining bath chamber had been used as a special deposit of this material, while a late *pithos* containing lime stood in its entrance passage. A small room immediately South of the portico of the 'Megaron' was found moreover to have been actually turned into a kiln, in the superficial stratum of which were found a number of mature Mycenaean cups and vases. It was obvious, too, that the plaster on the North wall, as probably on the destroyed upper part of the East wall, and again in the corridor leading to the inner rooms to the West, had been deliberately picked away and thrown aside in the heaps in which it was found. Oddly enough the earlier decorative plaster has only been preserved in its place on the upper part of the walls of the bath chamber, which itself had been converted into one of the chief receptacles for the restorer's lime.

Exploration of earlier strata.

Much, however, remained to be elucidated that was not touched by our somewhat arduous work of clearing during the Spring of 1902. At that time indeed, with much perishable evidence to be safeguarded—including the carbonized remains of the benches—nothing more had been attempted than to clear out the whole area to the floor-level of the 'Megaron' as it existed in the last Age of the Palace, and at the same time to extract the important painted plaster fragments from the surface deposits.

'Mosaiko' Floor of M. M. II *b* Date.

Successive pavements and levels.

A much more complicated problem, however, remained to be investigated. Below the level cleared by the original excavation lay two further well-marked floor-levels. There were here in fact represented at least four stratigraphic phases. How much of the earlier history of the Hall would have been lost without further exploration!

On raising a series of the gypsum paving slabs—which were some 4–5 centimetres thick—at various points within the two inner sections of the

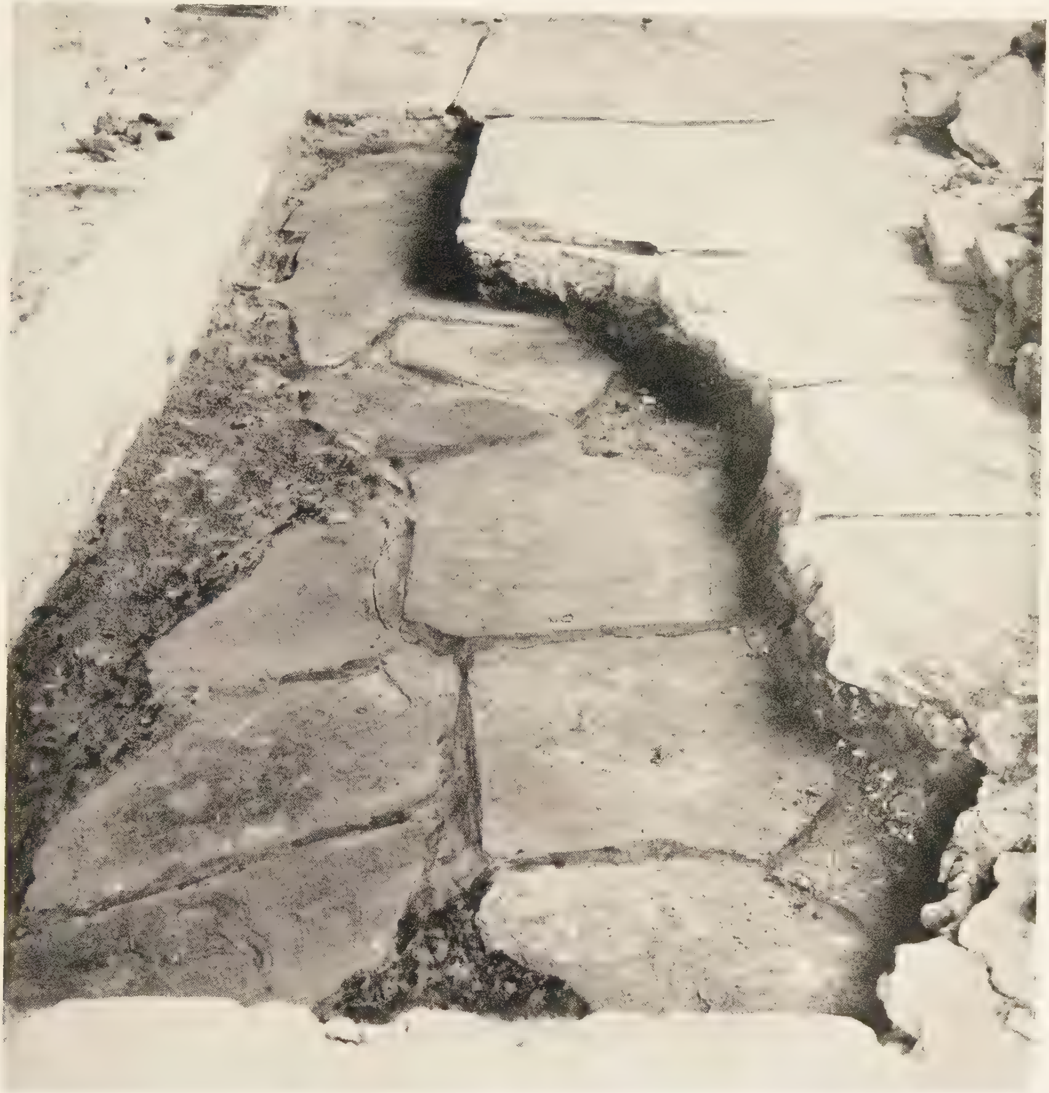

FIG. 235. 'MOSAIKO' PAVEMENT (M. M. II *b*) BENEATH LATER GYPSUM SLABBING EAST OF CENTRAL STYLOBATE OF 'QUEEN'S MEGARON' BROKEN OFF TO LEFT FOR CONSTRUCTION OF STYLOBATE (VISIBLE TO LEFT OF PAVEMENT).

'Megaron' there came to light, beneath an intervening deposit of a uniform depth of from 9 to 10 centimetres, a very fine example of a pavement of the class already described as 'mosaiko'.[1] This consisted of irregular polygonal

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[1] See Vol. i, p. 211. A fine sample of this 'mosaiko' pavement on the West border of the central stylobate of this Megaron, as revealed beneath the later gypsum paving, is there given on p. 210, Fig. 155. See, too, the section of 'mosaiko' floor beneath this gypsum slabbing in the Magazine of the 'Medallion Pithoi', p. 321, Fig. 234.

'Mosaiko' pavement slabs of the very hard material known as ἀμυγδαλόλιθος, or 'almond stone',—in truth a kind of iron-stone, often showing variegated hues and striations,

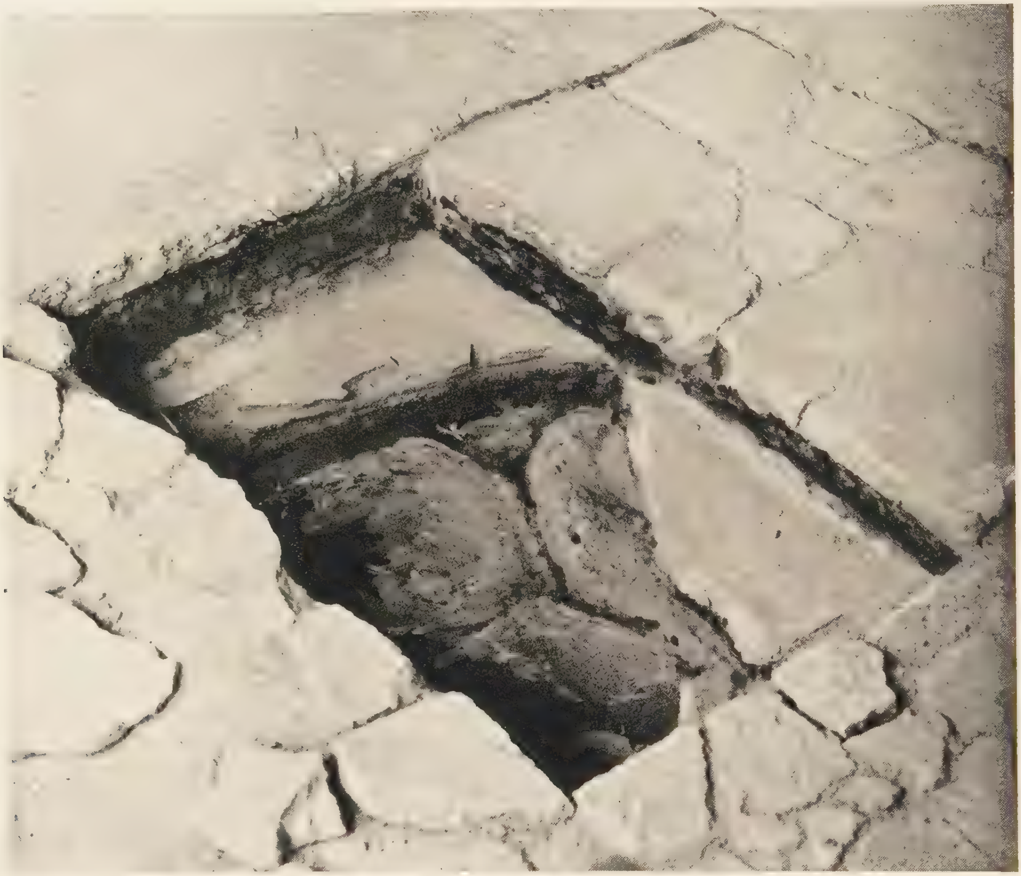

Fig. 236. Section beneath Gypsum Slabbing of West Section of 'Queen's Megaron', showing 'Kalderim' Pavement under Intervening 'Mosaiko'.

below gypsum slabbing. and compacted together by means of a kind of clay and stucco cement with a bright red facing. A view of a patch of this, near the doorway of the Eastern section of the Hall, is given in Fig. 235, but the photographic reproduction can give no idea of the delicate colour effects of the separate slabs, or of the brilliant red hue of their interstices.

These slabs, beautifully smoothed and finished on their upper surface, were uneven below, varying in thickness from about 6 to 12 centimetres, and the deposit beneath them, containing the M. M. II *b* sherds, was of a mean depth of about 20 centimetres. In several places—as for instance in the small area uncovered about the middle of the West section of the 'Megaron', and photographically reproduced in Fig. 236—this was found to overlay a pavement of an earlier, rougher kind that is very characteristic of the earliest phases of the Palace history. It was called by the workmen 'kalderim',[1] from the reminiscences it suggested of Turkish cobbled roads. Its unevennesses had, however, been originally concealed beneath a thick plaster coating.

'Kalderim' pavement below this.

The fine 'mosaiko' pavement thus seen in its relative position between the early Middle Minoan 'kalderim' and the gypsum slabbing that already marks the earlier M. M. III phase, had a wide extension throughout the area afterwards occupied by the covered sections of the 'Queen's Megaron'. The test excavations beneath the later pavement, here carried out in all directions, brought out the evidence of it at all points, though no trace of it was found inside the adjoining bath-room.[2]

'Mosaiko' system M. M. II *b* – its original extension.

Two remarkable facts resulted from these explorations as carried by me to their final conclusion in 1929. It is clear, in the first place, that this 'mosaiko' pavement had originally extended without a break throughout both covered sections of the 'Megaron'. At one point, indeed, the continuity is still maintained, one of the 'mosaiko' pavement slabs running under the South pier of the door-opening that connected the two sections. On the other hand, it is also clear that, except apparently in the case of the doorway, it was on all sides cut into or removed wherever the structures of the existing 'Megaron' came in contact with it. It was thus cut away,—only irregular edges being left,—in order to lay the foundations of both the Central and the Southern pillared stylobate. The breaking off of the pavement on the Eastern side of this is clearly shown in the photographic Figure 235. It was cut into in a wholesale fashion along the borders of the stylobate that supported the two columns of the Portico beyond, beneath which large foundation blocks were laid. It breaks off in a similar manner on the borders of the bath-room.

Cut into for M. M. III structures.

It will be seen that it is now impossible to ascertain the exact boundaries of the earlier floor. But so much we may at least gather. The 'mosaiko' pavement, of which we have such extensive remains, belongs to a hall without any central division like that of the later 'Megaron', but filling a single space. That it terminated East in a line approximately corresponding with that of the existing Portico may in itself be inferred from the analogy of the original Eastern boundary of the similar pavement in the 'Hall of the Double Axes', which is seen to have been very exactly followed by the Eastern Portico of that Hall. This conclusion, moreover, was confirmed by a very interesting find. During the excavation, undertaken in

Belongs to spacious Earlier Hall.

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[1] See *P. of M.*, i, pp. 209, 210.

[2] Slabs of good 'kalderim' pavement, however, were found here at a depth of 50 cm. beneath the surface of the later (gypsum) pavement (1913, Test 45).

High column-base connected with it.

1929, which laid bare the massive gypsum block supporting the Southern column of the later 'Megaron', there came to light, together with some iron-stone slabs of the 'mosaiko' class, a large fragment of a column-base of the tall early form, cut out of a very fine black stone.[1] As part of both the top and bottom face of this was preserved, the exact height, 48 centimetres, as well as the diameter, 68 centimetres, could be recovered and the whole restored as shown in Fig. 237. A clearly marked band of rough surface, 12 centimetres high, showed the original depth of the base from the upper level of the pavement, so that it would have risen above it 36 cm. A further rough band 11 cm. wide, but less well marked, showed that it had been later set in a pavement at a higher level, above which it rose only 25 cm. Above this line the polished face of the stone was brilliantly preserved.

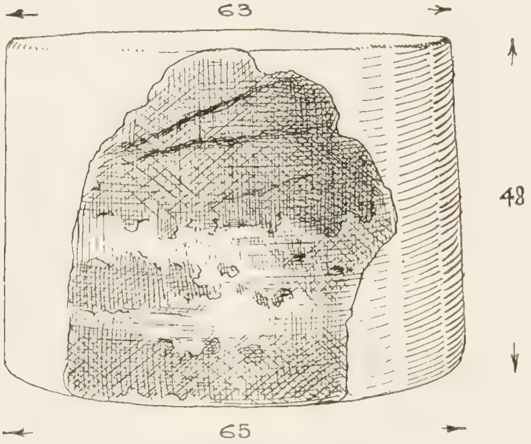

Fig. 237. High Column-base (restored) from Earlier East Portico of 'Queen's Megaron'.

Other evidences of M. M. II *b* date of 'mosaiko' pavements.

It will be seen that wherever exact chronological evidence is forthcoming the fine 'mosaiko' class of pavement marks some considerable restoration of the building that took place towards the close of M. M. II *b*.[2] This is well shown in the case of the 'Room of the Knobbed Pithos', described above, where slabbing of this class had truncated an M. M. II *a* 'knobbed pithos' standing on a typical 'kalderim' floor.[3] In this Section, too, a clay and stucco floor, supporting vessels of M. M. III *a* date, is almost immediately superposed on the 'mosaiko' level. In the neighbouring N.W. Portico a variety of this class of iron-stone pavement appears, in which the slabs are of a rectangular shape, its M. M. II date being also established by the character of the sherds that lay immediately beneath it.[1] Here again, moreover, we find the pavement in connexion with a type of column-bases of the tall M. M. II class, composed in the case of the preserved example of a grey limestone with light and dark striations, and about 55 centimetres in height.

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[1] My head mason, George Spourdalakis, stated that a black stone of the same kind was to be obtained below the surface of the ground near Spinalunga. The stone showed in places very fine quartz-like veins.

[2] This class of pavement survives in the ensuing period in the case of the central squares of gypsum floors, a late example of which is seen in the 'Room of the Throne'. It also finds a later analogy in the green schist pavements specially rife in M. M. III and L. M. I. The interstices of these were filled in the same way with a clay and plaster cement, showing a bright red or white facing.

[3] See above, p. 18 seqq., and p. 24, Fig. 12.

Of the decorative system with which this 'mosaiko' stage was associated as regards painted plaster, it may be worth while calling attention to some evidence recently acquired in another quarter of the building. Considered in relation to the 'Marine style', which left its most splendid record on the walls of the 'Queen's Megaron' as rebuilt during the succeeding M. M. III Period, this evidence has, indeed, a very direct bearing on its artistic history.

'Mosaiko' Floor associated with 'Nature-printed' Fresco showing Sponges: Beginnings of 'Marine Style'.

'Nature-printed' fresco with sponges: associated 'mosaiko' system.

Supplementary explorations undertaken in 1929 in the area of the North-West Portico led to the acquisition of some very interesting evidence as to the class of decorative wall-painting that had existed in the structures with which this pavement and its adjoining portico were associated. It appears that, about the time when the neighbouring 'Lustral Area' was built, the Western border of the entrance on this side was rearranged, its new West wall, indeed, containing fragments of the iron-stone slabs taken from a part of the M. M. II *b* pavement[2] here broken away. Here, below the M. M. III *a* threshold and partly extending under the later wall, were found considerable remains, largely indeed fragmentary, of painted stucco wall-decoration—the first example of fresco painting not of a purely geometrical class which can be definitely dated to M. M. II *a*, always remembering that wall fresco may somewhat antedate the actual remains of flooring. The ceramic comparisons point to M. M. III *a*.

On a very dark, almost black, ground had been painted, in bright orange at more or less regular intervals and similarly disposed, rows of identical designs of objects showing a cellular texture within a somewhat irregular outline. It became at once evident that the objects thus reproduced were small sponges, and at the same time the absolute conformity of one design with another made it clear that there were here repetitions of the same model. In other words, this decorative scheme had been laid on the dark lime plaster surface when still damp, according to the regular fresco process of the Minoan decorators, by the repeated use of a single small sponge dipped from time to time in ochreous paint. What we have in this case to do with therefore is a process of 'nature-printing', here made use of in a mechanical manner to produce the maximum of decorative show with a minimum of labour.[1] The spirit of this work is in fact thoroughly modern, and the resulting effect when spread over a whole chamber must have vied with that of a Victorian wall-paper where the same bunch of roses is repeated in every direction—horizontally, vertically, and diagonally.

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[1] Excavations of 1929.

[2] Tests made in 1929 beneath its slabs produced a number of sherds belonging to a mature stage of M. M. II, a few earlier, but nothing later.

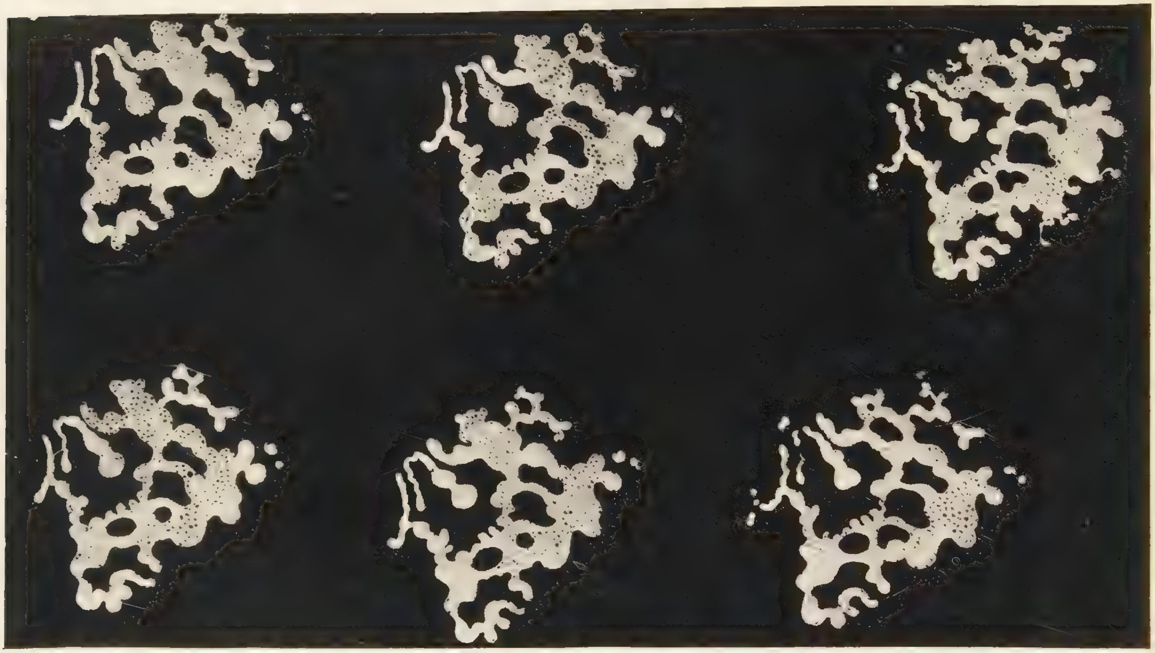

Fig. 238. Section of Wall Plaster showing Nature-printed Sponges painted Ochreous Yellow on a Dark Ground (probably M. M. II *a*).

Fig. 238, mechanically reproduced for me by means of a tracing, shows the repetition of the sponge motive on one of the larger pieces from the painted plaster deposit. In Fig. 239 an illustration is given of the result of similar imprints by a small modern sponge from the Candia market.

Ceramic parallels to process.

It is interesting to recall the fact, already recorded,[2] that the same process was at that time in vogue among vase-painters. Fig. 240 shows a M. M. II *a* cup with a series of imprints in white on a black ground evidently made by a small sponge on the end of a stick such as painters still use. Various parallel instances have been given—all belonging to the same epoch—of similar mechanical methods of repeating designs, among them **C**-like figures,[1] printed, apparently, by means of a half section of reed. The repetition of stamped designs is also frequent on the fine 'egg-shell' bowls with metallic lustre imitative of silver originals, while in some cases the *cachet* of the potter is repeated with a stamp bearing hieroglyphic characters.[2]

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[1] Mr. Noel Heaton informs me that sponges are still used in the same way by modern decorators.

[2] *P. of M.*, i, pp. 244 and 247, and Fig. 184, *b* (here reproduced in Fig. 240).

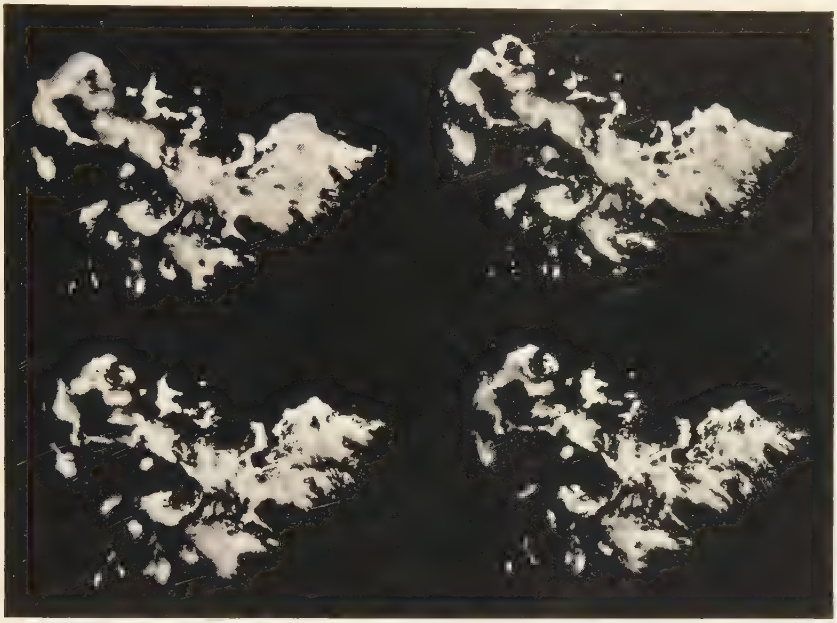

FIG. 239. IMPRINTS OF MODERN SPONGE.

At a later date—about the close of M. M. III *b*—we have seen a very close parallel in mechanical wall-decoration presented by the geometrical arrangement of crocus-clumps on a large painted stucco fragment from the 'House of the Frescoes',[3] where, however, the separate sprays, though almost identical with one another, seem to have been subsequently touched up by the painter's brush.

Printed sponges stage towards later 'marine style'.

It is at the same time undeniable that the unit of decorative multiplication made use of in this case and that of the sponges—as in the wall-paper designs cited for comparison—was itself selected as an object of natural beauty. The choice of a sponge for mechanical reproduction, though doubtless of exceptional convenience for the purpose, must, in fact, be also taken in connexion with the Minoan artistic appreciation of marine forms. The beginnings of what may be called the 'marine style' are already very well marked in the vase-painting of the first Middle Minoan

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[1] *P. of M.*, i, p. 245, Fig. 185.

[2] *Ibid.*, i, p. 242, Fig. 182, *c*.

[3] *Ibid.*, ii, Pt. II, p. 459, Fig. 271.

Period, and on one bowl, amongst swimming fish, we see red-coloured objects with white dots which, though of elongated shape, must very probably be recognized as sponges.[1] So, too, though in the instance given sponges were actually printed on vases as on the walls, we also see them more individually delineated by artistic methods. Sketchy delineations of what appear to be sponges above a yellow rock with red serpentine veins are seen on part of a 'Marine' representation from the 'House of the Frescoes' (Fig. 241). The sea-water is here indicated by a deep blue.

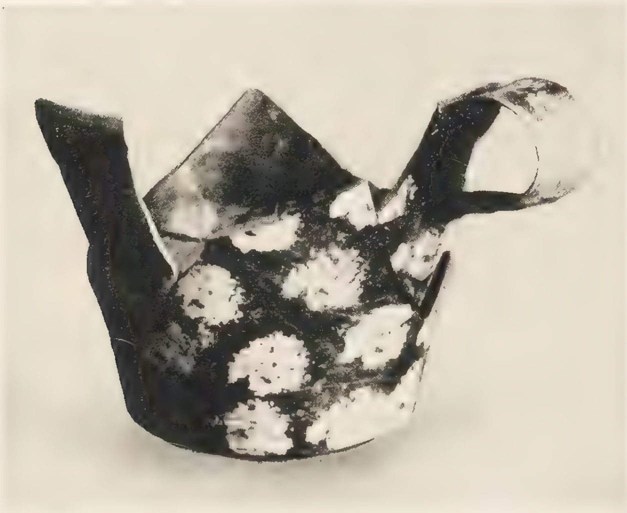

FIG. 240. EGG-SHELL CUP WITH SPONGE DECORATION (M. M. II *a*): 'ROYAL POTTERY STORES'.

In any case the fact that the structural phase illustrated by the fine 'mosaiko' floor of the earlier hall that had occupied the site of the 'Queen's Megaron' was associated in the case above cited with a 'marine style' of this simple mechanically reproduced kind has a special interest in relation to its subsequent history. For, as we shall see, this style in some respects attained its highest development in the 'Dolphin Fresco' that adorned its later walls.

That the facilities of 'nature-printing' offered by sponges gave a special prominence to these sea products in fresco work of this class—including their reflections in gem types and small reliefs—is only what might have been expected. Often we see a combination of a porous spongiose texture accompanied with small ramifications that recall certain corallines or algae. Or again, as below, in the 'Dolphin Fresco' itself[2] there appear irregular globular excrescences with small spiky projections like those of sponges (Fig. 242).

An early evidence of the existence of the marine class of decoration in this part of the 'Domestic Quarter' is afforded by a remarkable section of

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[1] *P. of M.*, i, p. 182, Fig. 131, *b*.

[2] See *ibid.*, i, p. 543, Fig. 395. The excrescences are there compared with coralline, but the spiky outlines point rather to those of sponges.

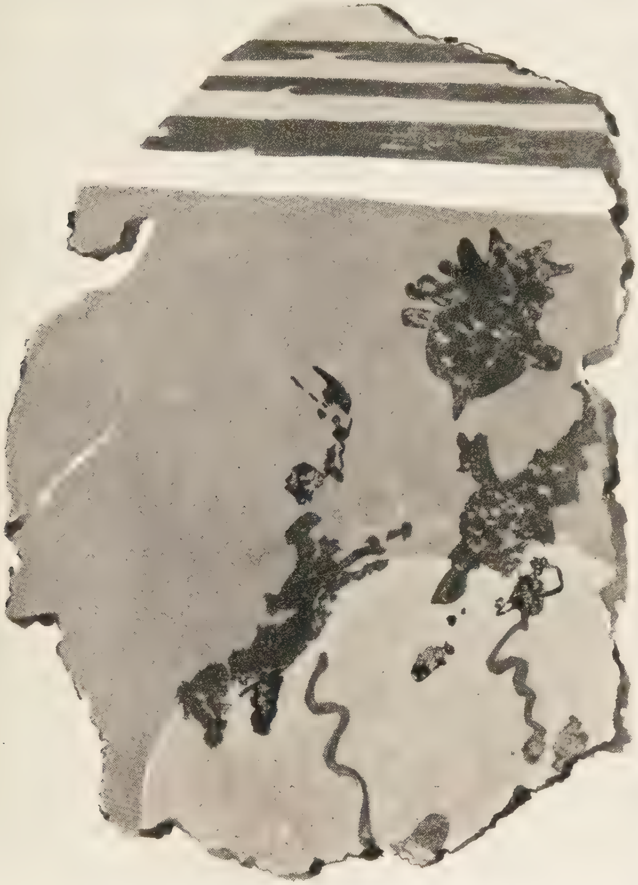

FIG. 241. SPONGES OR SEAWEEDS ABOVE ROCK WITH SERPENTINE VEINS: 'HOUSE OF FRESCOES', KNOSSOS.

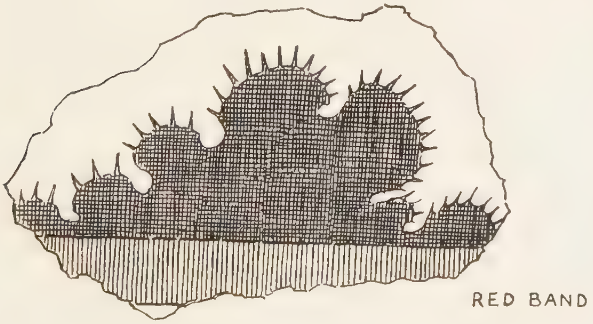

FIG. 242.
PART OF BORDER OF 'DOLPHIN FRESCO', SHOWING SPONGE-LIKE GROWTHS.

Section of red gypsum border of 'marine' panel.

what seems to have been the lower border of some large panel in this 'marine style' found in a space formerly occupied by the 'Service Staircase'[1] to the North-East of the 'Queen's Megaron' (Fig. 243). It was cut out of a kind of red, porphyry-like gypsum, much in vogue from about the middle of M. M. III, and, from the position in which it lay, was probably derived from some upper room on this side. It fits on in form to the class of marine inlays and reliefs so beautifully illustrated by the faïence group from the Temple Repositories, and, indeed, closely resembles, though on a much larger scale, the ramifying border, with its suggestions of marine growths, that was there associated with the flying-fish and sea-shells.[2] For the 'nature-printing' itself, moreover, we have a striking contemporary parallel in the terracotta reliefs from the 'Koulora' of the West Court—found in association with masses of M. M. III sherds—representing sea creatures like limpets, pecten-shells, barnacles, and small crabs moulded from matrices formed on the actual objects.[1]

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[1] A. E., *Knossos, Report,* 1902, p. 75. It does not seem to have been part of a seal as there suggested.

[2] *P. of M.*, i, pp. 520–2, and Fig. 379.

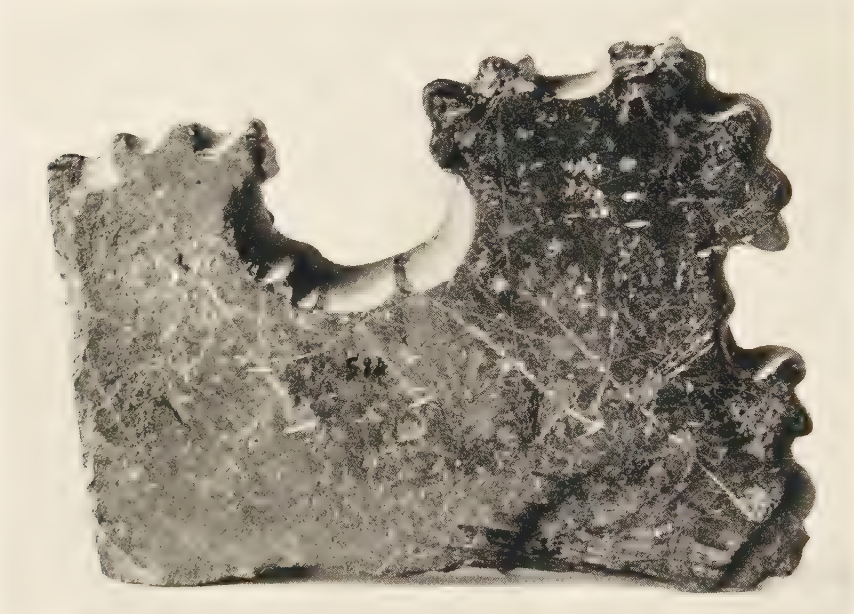

FIG. 243. PART OF DECORATIVE BORDER IN RED GYPSUM IMITATING ROCK WITH MASSED GROWTHS. (WIDTH 24 CM., HEIGHT 19 CM.)

Gypsum Pavement and Pillared Stylobates of 'Queen's Megaron'.

Gypsum pavement answers later structures.

The gypsum slabbing that, as we have seen, overlay the fine 'mosaiko' pavement—separated from it by a deposit from 9 to 10 centimetres thick—has every appearance of being a continuation of that, already described, which covered the interior sections of the 'Hall of the Double Axes', with which, indeed, it is connected without a break by the similar pavement of the intervening 'Dog's-leg Corridor'. In both these cases a series of exploratory excavations showed that the latest pottery found beneath the pavement-level belonged to a mature stage of M. M. III *a*. It was reasonable, therefore, to expect the same result from the numerous tests made beneath the floor of the 'Queen's Megaron', and as regards the Eastern Section this expectation was verified, explorations in a pure element beneath the slabs producing only early M. M. III sherds. But in the case of the inner Section of the Hall the results of similar researches beneath the gypsum pavement in various parts of this area were consistently different from this. There were in many places mixed elements, but it may be said

Underlying stratum M. M. III *a* in E. section of Megaron.

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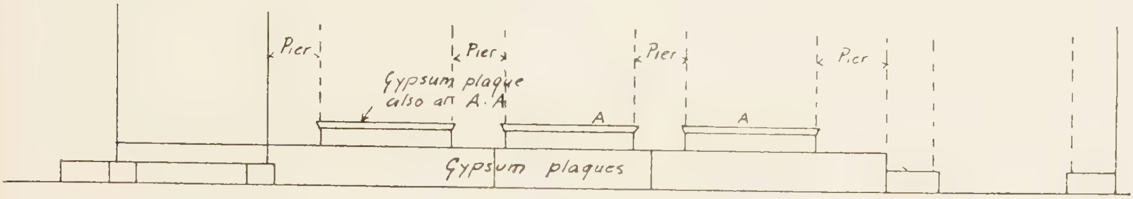
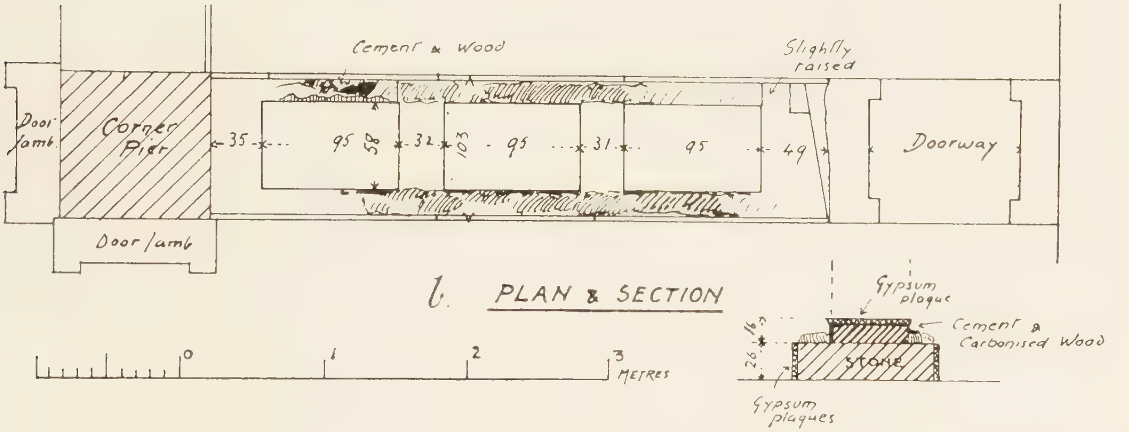
[1] *P. of M.*, i, pp. 521–2, Figs. 380, 381.

In inner section L. M. I *a* sherds predominate.

that in all cases pottery belonging to the earlier stage of L. M. I came to light, and this class was generally predominant. It looks, therefore, as if for some reason the slabbing of this Western Section had been taken up and perhaps partly renewed at the time of the considerable restoration and redecoration of this Quarter, of which we have so much evidence, towards the middle of the First Late Minoan Period. A good record of the new style of wall-decoration due to that era was in fact still visible in the remains of the spiral and rosette band still attached to the wall of the neighbouring Bath-room.


Pier
Pier
Pier
Pier
Gypsum plaque also an A
A
A
Gypsum plaques

a. ELEVATION


Cement & wood
Slightly raised
Door Jamb
Corner Pier
35
95
58
32
103
95
31
95
49
Doorway
Door Jamb
0
1
2
3
METRES
Gypsum plaque
Cement & Carbonised Wood
16
26
STONE
Gypsum plaques

b. PLAN & SECTION

FIG. 244. PLAN, SECTION, AND ELEVATION OF CENTRAL PILLARED STYLOBATE OF 'QUEEN'S MEGARON' ABOVE THE FLOOR-LEVEL. BY THEODORE FYFE.

Pillared stylobate connected with M. M. III paving—advantages of system.

It is clear that the two pillared stylobates that form the distinguishing feature of this Hall and one of which divides it into two parts were constructed at the same time as the earlier part of the gypsum pavement.

They themselves represent a new and compendious expedient of the Minoan architects, serving more than one purpose at the same time. The pillars themselves, while so shaped as to let through the maximum of light and air, fulfilled the further function—analogous to that of the lines of door posts in the neighbouring Hall—of acting as a support for the main rafters above. At the same time the raised central part of the stylobate, on which the pillars stood, in conjunction with the ledges on either side supplied a

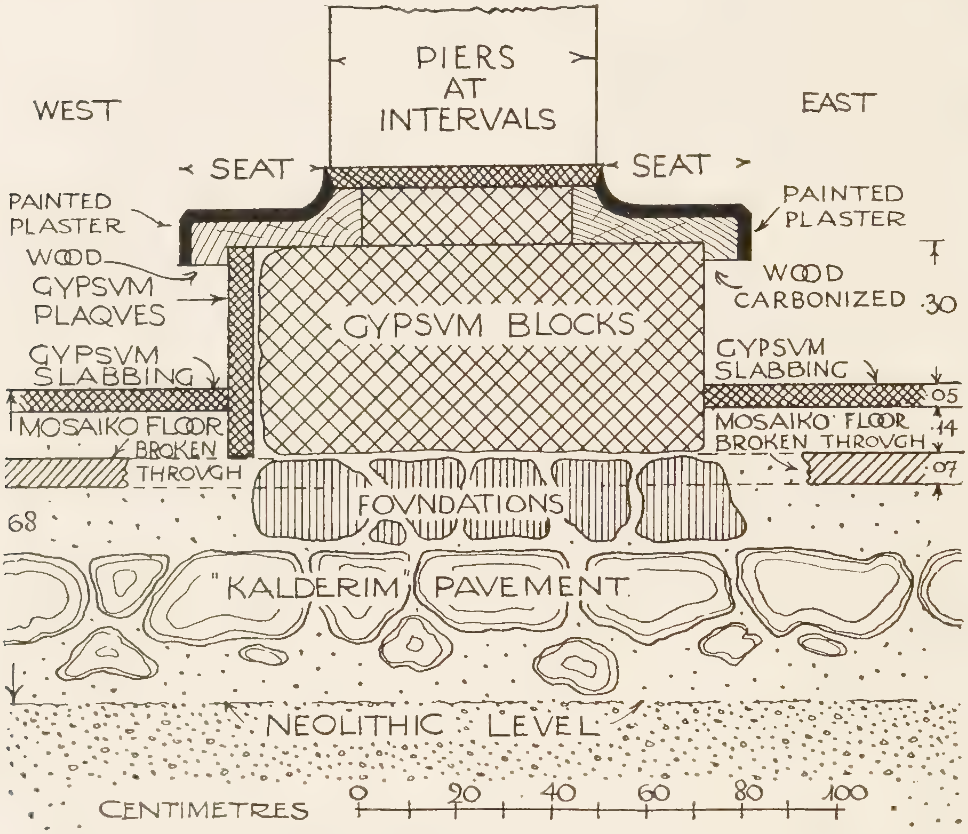

PIERS AT INTERVALS
WEST
EAST
SEAT
SEAT
PAINTED PLASTER
PAINTED PLASTER
WOOD
GYPSVM PLAQVES
WOOD CARBONIZED
.30
GYPSVM BLOCKS
GYPSVM SLABBING
GYPSVM SLABBING
.05
MOSAIKO FLOOR
BROKEN THROVGH
MOSAIKO FLOOR BROKEN THROVGH
.14
.07
68
FOVNDATIONS
"KALDERIM" PAVEMENT
NEOLITHIC LEVEL
CENTIMETRES
0
20
40
60
80
100

Fig. 245. Section of Central Pillared Stylobate of 'Queen's Megaron' showing Wooden Seats covered with Plaster as restored and Underlying System.

Wooden benches along stylobate.

convenient base for lines of wooden benches. The surface of the woodwork of these was finished off with coloured plaster, which, as shown in the Section, Fig. 245, curved up behind against the bevelled edges of the coping slabs so as to form a more convenient seat. For the sake of still greater comfort this in turn may well have been covered with gay cushions. It rose only 38 centimetres above the pavement level, and seems to have been primarily designed as a woman's seat.

So much of the structure of these benches, including a good deal of the carbonized wood, was preserved at the time of excavation as to make it possible to restore them in their original form. Fig. 244 shows Mr. Theodore

Fyfe's original plan, while the detailed section of the stylobate in relation to the successive floor-levels given in Fig. 245 adds the result of the later explorations.

The core of the central structure itself consisted of solid blocks, and the intervals visible in its raised part, as well as the faces of both stylobates on the sides flanking the inner area of hall,[1] were further covered with slabs of that material. The Section, Fig. 245, which it has been now possible to complete, of the stylobate of the central pillar screen shows the base of one of the piers, the wooden seats with their plaster coating, and the foundations, below, of the gypsum core. These rest in turn on the remains of an early ‘kalderim’ pavement. Above this, on a level with the base of the gypsum blocks, gaps are shown where the slabs of the ‘mosaiko’ floor are broken away.

Double Axe signs on walls.

The pillared stylobate formed part and parcel of the fabric of the whole ‘Megaron’ as constructed about the close of the early phase of the Third Middle Minoan Period. Its Southern line in fact forms a section of the exterior wall-line on that side. The corresponding wall North is itself an integral part of the same system as the ‘Hall of the Double Axes’ and its connected structures; it is observable, indeed, that both the limestone and the gypsum blocks of the North wall of the ‘Megaron’ bear Double Axe signs, incised in a somewhat superficial manner identical with that visible in the case of the signs on the light-well wall of the larger Hall and to which its name is owing.

Double Axe socket found by central stylobate.

The presumption, confirmed by other evidence, that the repetition of the signs in the case of the ‘Hall of the Double Axes’ had a real relation to the domestic ritual performed within it[2] was curiously verified in this case. A small limestone socket, of the stepped pyramidal kind characteristic of those in which the Double Axes were set, was in fact discovered near the South end of the central stylobate. It has been restored in position with the sacred weapon on a shaft about a metre high in the Coloured Plate showing—so far as can be recovered from the data before us—the interior of the ‘Megaron’ as it originally existed in the early days of the New Era.

Fresco of Dancing Lady.

An interesting record of what seems to have been the L. M. I *a* decoration of the ‘Megaron’ was recovered from a heap of detached stucco fragments

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[1] The East face of the central line of stylobate was not coated in the same way. The stylobate flanking the light-area to the South had no outer ledge.

[2] See above, p. 346, and Coloured Plate XXIV.

Fresco of 'Dancing Lady'

that lay on the South side of the Eastern light-area.[1] Remains of a panel found among these showed the upper part of the figure, about half natural size, of a dancing lady, already illustrated in relation to the fresco depicting the 'Sacred Grove and Dance'.[2] As is indicated by the coloured photograph reproduced in Pl. XXV, here, she is clad in a jacket of the fashionable type

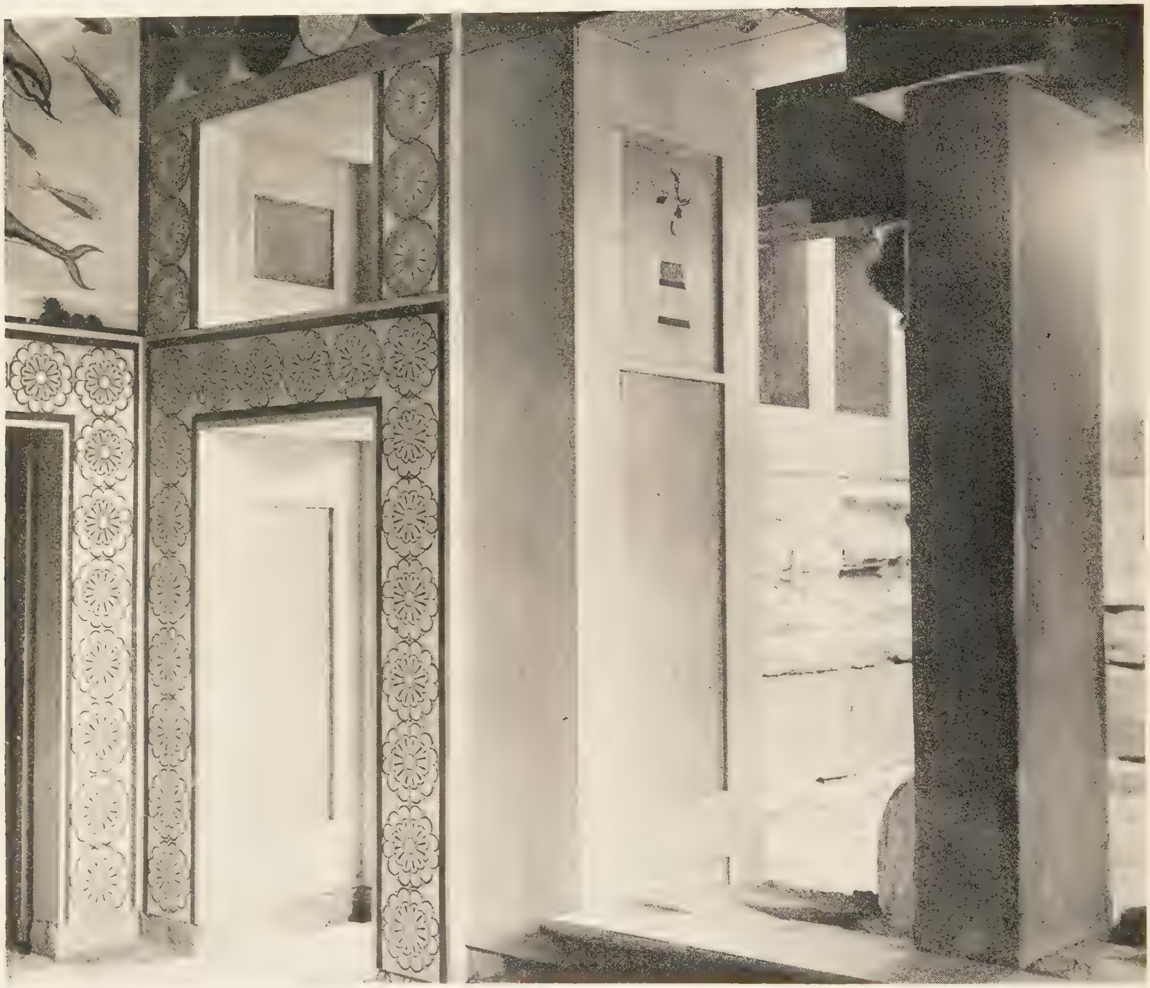

FIG. 246. PILLARS OF CENTRAL DOORWAY AND STYLOBATE OF 'QUEEN'S MEGARON' RESTORED, SHOWING REPLICA OF FRESCO OF 'DANCING LADY'.

found by pillar of stylobate.

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[1] It was found about 70 cm. above the level of the cement pavement near the top of a heap of painted plaster fragments, containing also many remains of the 'Dolphin Fresco', which lay on both sides of the base of the later East wall of the light-area.

[2] See above, pp. 70, 71, and Fig. 40. Cf., too, the black and white drawing, *Knossos, Report*, 1902, p. 55, Fig. 28.

with a yellow ground and blue and red embroidered border beneath which is a diaphanous chemise, its upper line showing clearly across the chest. She wears a flounced gown, while the triple tresses of her long hair fly out on either side indicating the revolving motion of the dance. As is shown in Fig. 246, and the Coloured Plate XXVI (Frontispiece), depicting the restored interior of the 'Megaron', this fresco design was exactly adapted to fit the space offered by panels in the side face of the pillar and a replica of it has accordingly been placed in one of them. The style of this painting agrees very well with the time of the redecoration at the close of L. M. I *a*.

Painted Stucco Relief of a Decorative Papyrus Pattern.

An important fragment of painted stucco relief found in the S.W. corner of the narrow area that flanked the inner Section of the 'Megaron' and its pillared stylobate on that side has a special interest in its bearing on the interior decoration. It seems to have made its way to the position in which it lay through the opposite pillar opening.

Painted stucco relief with papyrus pattern.

As will be seen from the drawings given in Fig. 247, it forms part of a papyrus pattern presenting the somewhat curious kind of relief seen in the section and the perspective drawing given. The outline of the papyrus spray is here nearly as much raised as the interior projection—a characteristic which recalls the impressions of gems engraved in the *méplat* manner. The foliage has a blue ground with black outlines to the shoots: the flower-like centre starts from a red base with black arches while its petals show alternately yellow, red, white, black, and blue zones. It differs from other examples in presenting a small side shoot, and no spiral attachment has been preserved, but it is in any case clear that this decorative relief stands in the closest relation to a papyriform class of ceiling patterns of the well-known type represented by the ceiling cut in relief on the clay slabs of the inner chamber of the great tholos at Orchomenos,[1] in which such sprays are linked together by spirals. A splendid example of a ceiling consisting of spirals and rosettes in painted stucco reliefs from the room that contained the bulk of the 'Miniature Frescoes' has already received illustration in Coloured Plate XV, above.[2]

Recalls ceiling decoration as that of Orchomenos.

Parallels from Tirynthian friezes.

This relief fragment fits in well with the character of the L. M. I scheme of decoration in the 'Megaron' to which the bands above the dadoes also belong. It closely connects itself with fresco friezes such as those of the Later Palace at Tiryns,[1] where the papyrus motive itself in an almost identical form is combined with spirals and rosettes resembling those preserved *in situ* in the Bathroom adjoining the 'Queen's Megaron'. A version of it is also linked with a fine spiraliform design in the remains of the painted stucco frieze believed to have been derived from the Upper Chamber above the 'Hall of the Double Axes'. All these motives reflect the growing influence of Eighteenth Dynasty ceiling decoration, and this Egyptianizing fashion of decoration on the walls was at Knossos itself

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[1] Schliemann, *Orchomenos*, Pl. I; Perrot et Chipiez, *Hist. de l'Art*, vi, *Grèce Primitive*, pp. 543, 544, Figs. 220, 221, &c.

[2] Opposite p. 31. Remains of another similar ceiling were found by the great 'East Hall' to be described below.

Fits in with L. M. I. decoration.

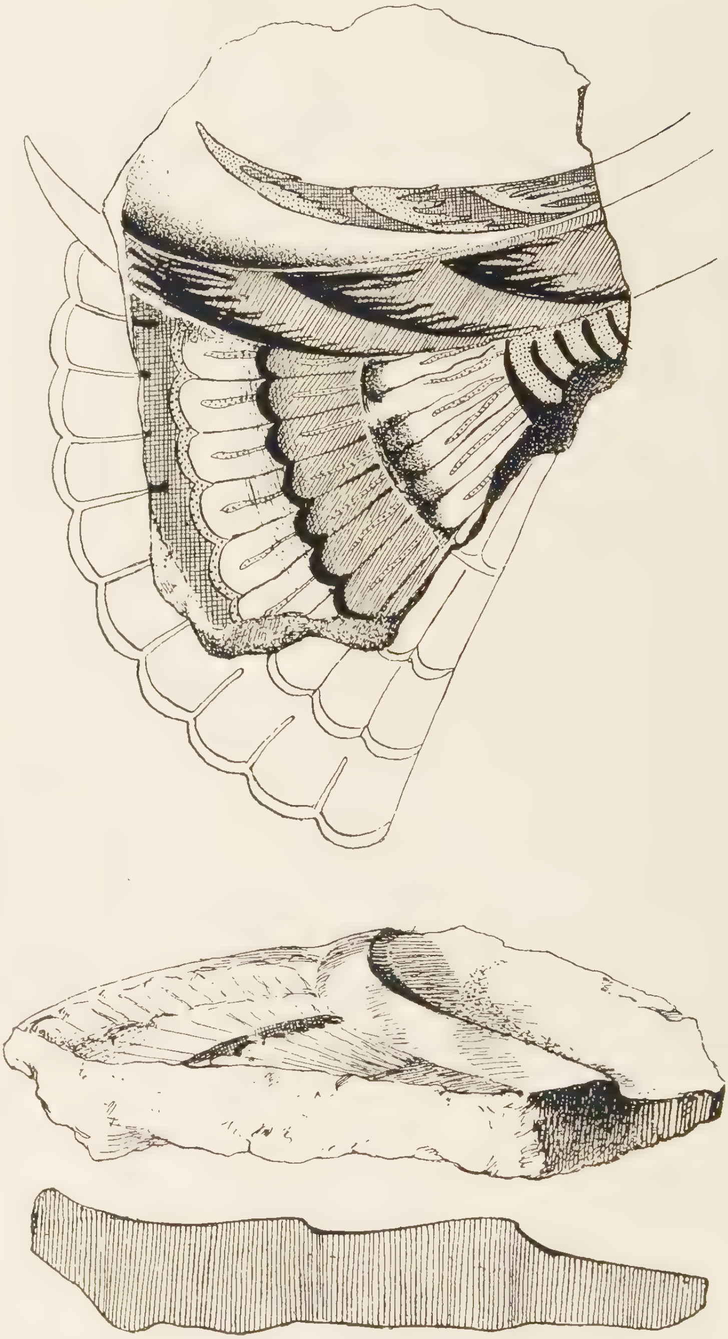

Fig. 247. Fragment of Painted Relief of Papyrus from a Decorative Scheme: South Light-area, 'Queen's Megaron'.

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[1] Rodenwaldt, *Tiryns*, ii, Pl. VII, and compare the other parallel examples cited in the text, pp. 175–9. See, too, Schliemann, *Tiryns*, Pl. V.

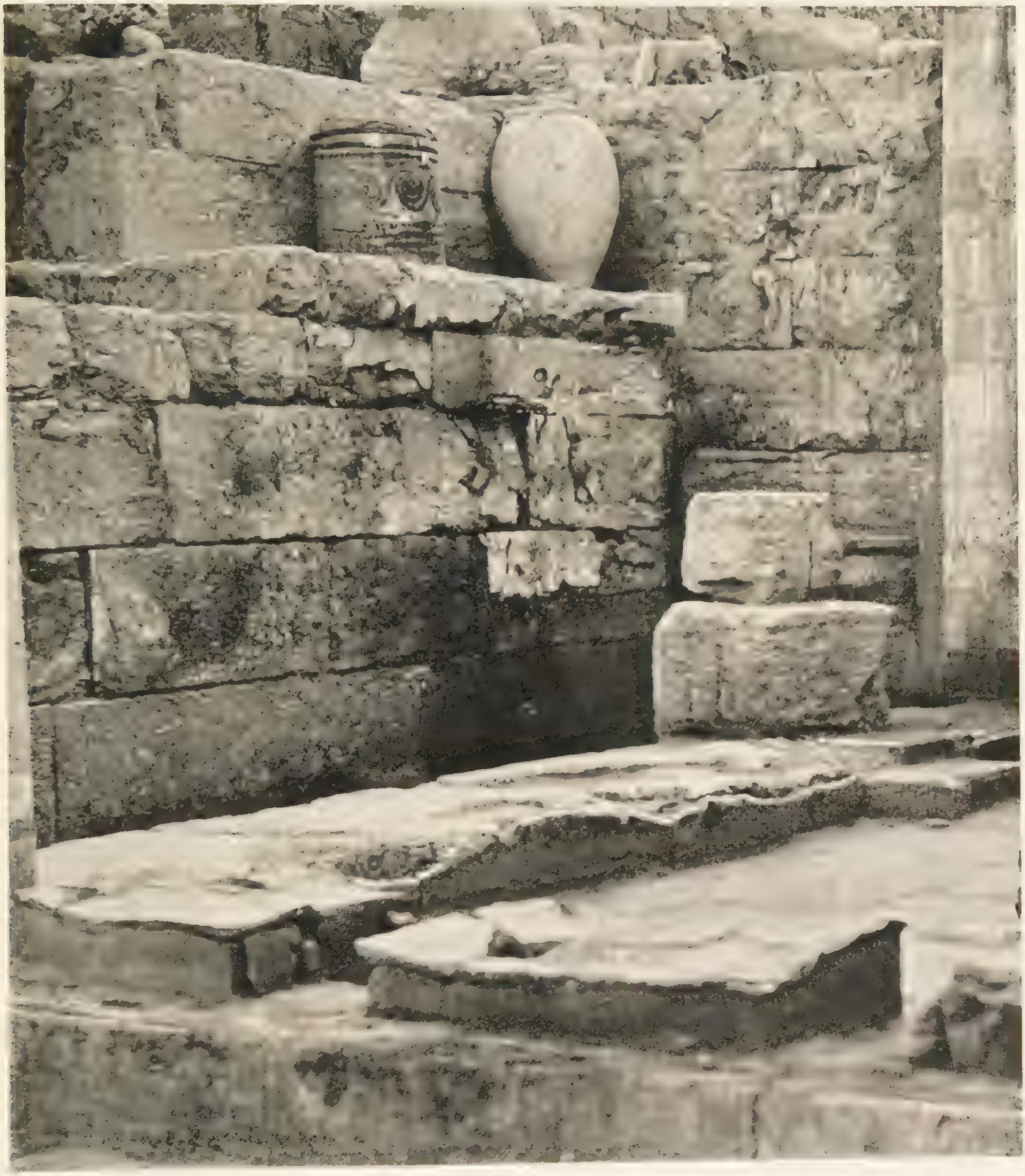

Fig. 248. Walling at Back of South Light-area of 'Queen's Megaron' (M. M. II), the Upper Line of which recedes to secure Better Incidence of Light. Part of Central Stylobate of Megaron in Foreground.

to find a striking reaction in the 'Palace Style' of ceramic decoration that grew up there in the last age of the building. The painted stucco fragment with the conventionalized papyrus relief shown in Fig. 247 stands, indeed, in

Anticipation on walls and ceilings

ceramic ‘Palace Style’.

a very near relation to those of the fine painted jar found on the first landing of the staircase in the ‘Royal Villa’.[1]

Southern Light-area of ‘Megaron’.

S. Light-area—M. M. II walls.

The open elongated area where this decorative relief was found, flanking the pillared stylobate that lighted the inner section of the ‘Megaron’ on its South side, is backed by a wall of considerable architectural interest. It has been already illustrated in the First Volume of this work,[2] as supplying the best preserved example of ashlar masonry dating from the M. M. II Period to be seen on the Palace site. Its elongated blocks show the ⋘ or ‘branch’ sign in its early phase. The clay bedding, about a centimetre thick, between the courses is here a characteristic feature.

This wall—the surface of which had been considerably damaged by fire—consisted of only four courses with a projecting coping above, and it is succeeded, beyond a narrow terrace level, by another wall of the same construction rising two metres back from the face of the first. Only the lower two courses of this, however, are preserved. (See Fig. 248.)

Incidence of light.

The result of this stepping back of the area walls was to secure a satisfactory incidence of light to the hall opposite, both in its earlier and its later form.

Access.

The only access to this narrow light-court was by a doorway at its Eastern end, opening into a small chamber from which another contiguous doorway led into the portico of the East section of the ‘Megaron’. This little room also led, across another intervening enclosed space that may have served as a guard-room, to the light-court on the Southern flank of the ‘Hall of the Double Axes’. (See Plan, Fig. 249.)

These precautions show the extreme privacy of this narrow inner area. Beneath its cement floor ran the main channel of a built drain that served the Domestic Quarter on this side, and the further course of which received a tributary drain by which the surface waters from the Eastern light-court of the ‘Megaron’ were carried off.

Eastern Light-area of ‘Megaron’.

E. light-area: successive E. walls.

The original outer wall of the larger light-area that lies East of the central stylobate formed part of the same system to which it, together with the gypsum floor as first laid down and the existing bi-columnar Portico, belongs. This seems to have been ruined by the great Earthquake towards the close of M. M. III, and only its foundations and base-slabs remain. It

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[1] *P. of M.*, ii, Pt. II, p. 400 and Fig. 231.

[2] *Ibid.*, i, p. 204, and Fig. 153.

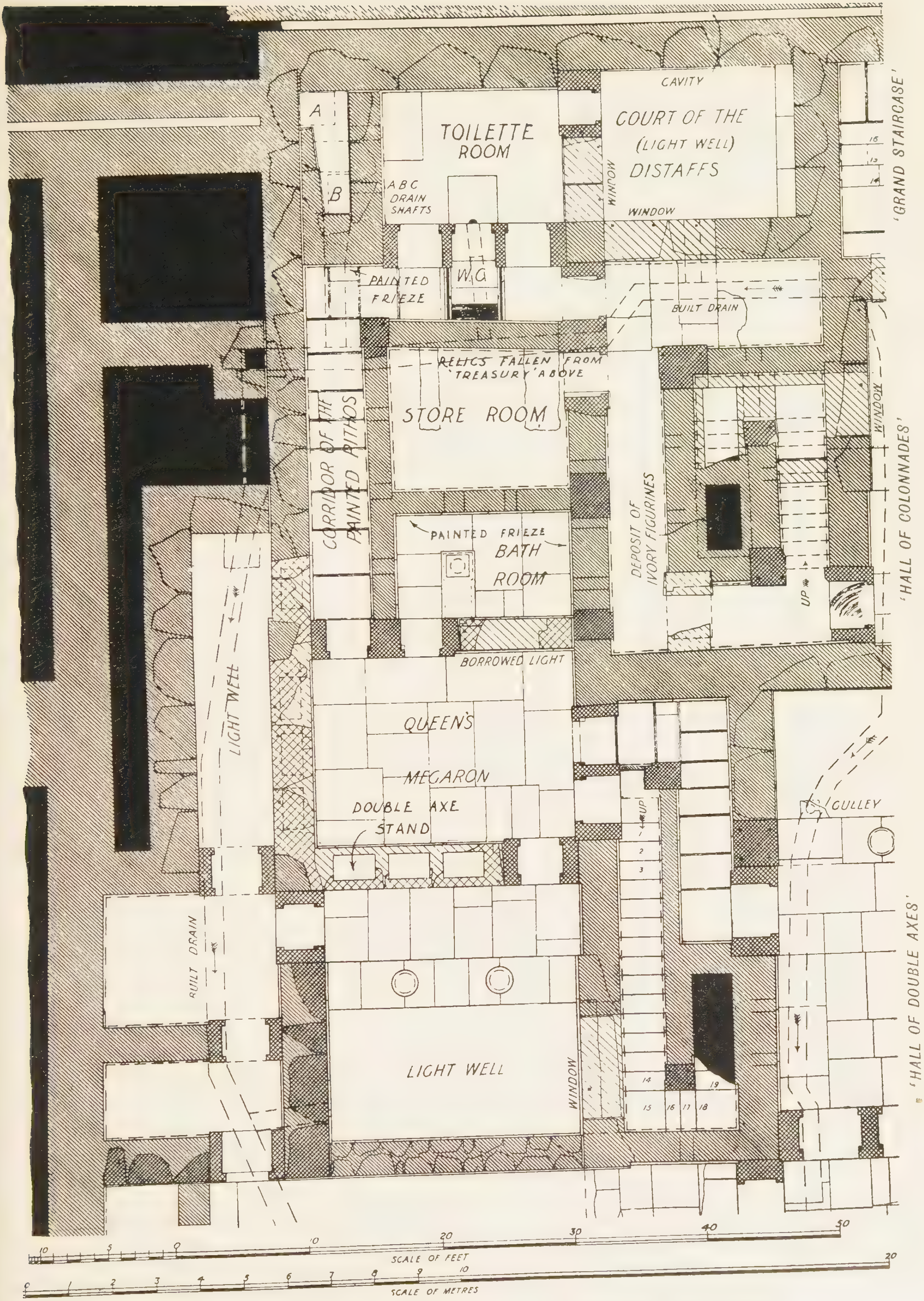
A
B
TOILETTE ROOM
ABC DRAIN SHAFTS
CAVITY
COURT OF THE (LIGHT WELL) DISTAFFS
WINDOW
WINDOW
16
15
14
'GRAND STAIRCASE'
PAINTED FRIEZE
W.C.
BUILT DRAIN
RELICS FALLEN FROM 'TREASURY' ABOVE
STORE ROOM
CORRIDOR OF THE PAINTED PITHOS
DEPOSIT OF IVORY FIGURINES
WINDOW
'HALL OF COLONNADES'
PAINTED FRIEZE
BATH ROOM
UP
LIGHT WELL
BORROWED LIGHT
QUEEN'S MEGARON
DOUBLE AXE STAND
UP
2
3
GULLEY
'HALL OF DOUBLE AXES'
BUILT DRAIN
LIGHT WELL
WINDOW
14
15
16
17
18
19
10
5
0
10
20
30
40
50
SCALE OF FEET
0
1
2
3
4
5
6
7
8
9
10
20
SCALE OF METRES

FIG. 249. PLAN OF 'QUEEN'S MEGARON' AND CONNECTED STRUCTURES.

was replaced, apparently, not long after its overthrow by the existing, somewhat narrower wall—70 centimetres in place of about 90 — the base of which is separated from the remains of the earlier wall-line by a deposit of red earth about 12 centimetres deep. (See Fig. 250.)

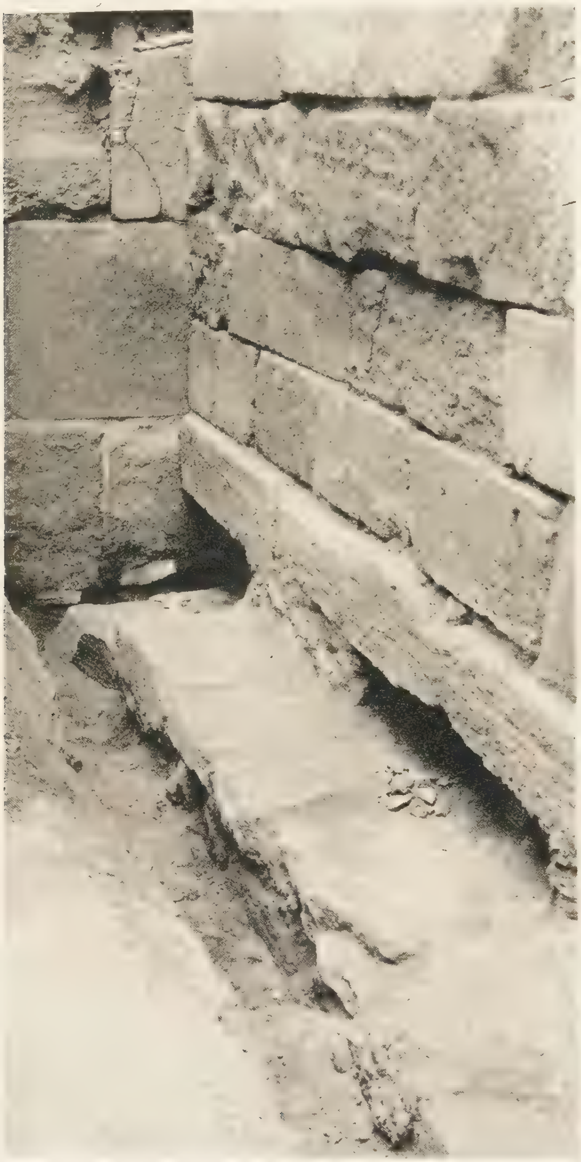

FIG. 250. EAST WALL OF LIGHT-WELL, 'QUEEN'S MEGARON', SHOWING BASE OF EARLIER WALL BELOW.

That this later wall was itself of comparatively early date appears from the result of careful explorations made in 1929, of the material beneath its base at two points—each about a metre in length—and which proved exclusively to contain sherds of M. M. III fabric. We may conclude with great probability that this wall formed part of the work of restoration carried out in the post-seismic phase of that Period. Throughout most of its length only two courses of it had been preserved above ground, and along the two sides of these immediately above the ground level, that there occurred considerable deposits of painted stucco belonging to the 'Dolphin Fresco', that in a special manner distinguished the 'Queen's Megaron' in its original state.

Reoccupation wall.

Inside the limits of these earlier walls, and approaching the borders of the Portico, were further remains of a third wall of bad construction and at a somewhat higher level, which from associated fragments was clearly the work of squatters of the Reoccupation Period, and it looks as if these had demolished a large part of the remains of the second wall to supply their materials.

The 'Dolphin Fresco'.

Remains of 'Dolphin Fresco'.

The tearing down of the fresco itself, and the throwing out of its fragments, may well have been due to the same agency, and in that case this fresco decoration with its lively designs of fishes—which, as already shown, belongs to the advanced naturalistic style of the M. M. III Period—may have kept its place on part of the walls to the close of the palatial Age (Fig. 251).

Over-lapping of decorative systems.

Many other remains of the 'Dolphin Fresco' were also found within the covered sections of the 'Megaron',[1] and its place there on a plaster backing to the rubble face of the walls above the high gypsum dado slabs was natural enough. The occurrence of the remains of this fresco on each side of the stump of the destroyed M. M. III *b* East wall, had from the first suggested that it had also extended to the upper field of this wall,[2] but the natural objection to this is that, according to the results of wide observation, the walls of Minoan light-areas were consistently faced with ashlar masonry which does not lend itself to the fresco technique. The possibility, indeed, cannot be excluded that, this being an exceptionally small light-court, the inner face of the upper part of its back wall may have been of rubble construction and have been treated like that of a covered space. There was, indeed, no real objection to such a procedure in a small well-protected area, since the ability of the Minoan fresco paintings to resist the weather was almost unlimited. Pieces of stucco that had already fallen from the walls during the palatial Age, and had been subject to long exposure, were found with their colours almost as fresh as when they were painted on the walls. A coloured fragment, moreover, of this class exposed to sun and rain for about thirty years, from the first days of the excavation, shows no visible deterioration in the brilliant hues.

Traces of painted stucco on light-well wall.

That the face of the ashlar masonry of light-areas was itself habitually covered with a thin painted stucco coating is certain, and a good illustration of this occurred on the South side of the light-court of the 'Queen's Megaron' itself. Some of the limestone blocks of this show a stucco coating about 3 millimetres thick, with a pale ochreous tint.

Section of 'Dolphin Fresco' reconstituted.

The fragments of the 'Dolphin Fresco' that presented most of the principal designs were put together in a manner calculated to restore something of the original effect. The nucleus of the composition was supplied by parts of two dolphins swimming in opposite directions, which happily completed one another, since the head part in one case, and the tail part of the other were principally preserved. The idea underlying the arrangement, as carried out by Mr. Fyfe for the panel placed in the Candia Museum (see Fig. 251), was of the smaller fry partly following in the dolphin's wake, partly scared by them, and darting off at various tangents from their fins and tails. One highly natural feature already referred to in Volume I,[1] in considering the place of this fresco among M. M. III wall-paintings, is the portrayal of the wreaths of spray that give such a vivid idea of motion, and may be compared with the similar use of flowing tresses by the Minoan artist in the portraying of leaping figures or of descended divinities.

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[1] A large part of one fish was found somewhat farther to the South.

[2] A. E., *Knossos*, *Report*, 1902.

A border fragment reproduced in Fig. 242, above, shows a dark marine growth that may well be a spiky sponge. Both the wreaths of spray and the sponges recur in the 'Flying-Fish Fresco' of Phylakopi,[2] which has been recognized as a contemporary work of the Knossian School. These features, indeed, are all that we have to indicate the sea itself, the field in both cases being painted white. At the same time this light background admirably serves to bring out the varied colouring of the fish themselves, their darker and lighter blue, yellow and ruddy orange. The dolphins, however, with their ultramarine flanks and waving yellow bands, show white bellies which are only separated from the field by their black outlines.

To restore in part the original effect, a spirited amplification of the existing remains of the 'Dolphin Fresco' has been executed for me by Monsieur Gilliéron, fils, along the upper part of the North Wall of the inner section of the 'Megaron'.

As remains both of the 'Dolphin Fresco' and of a later spiralform frieze of the same scale as that of the 'Hall of the Double Axes', were found above the L. M. I slabbing in this interior section of the 'Megaron', it seems clear that they must to a certain extent have coexisted. It is hard to see, however, how the M. M. III and L. M. I *a* styles could have been adapted to one another on the same wall, and perhaps the best explanation is that the spiral band, with its white field, was painted on a comparatively thin layer of plaster set above the older fresco, and that when the wall became dilapidated, the layers flaked off separately. This idea has been adopted in the partial restoration by Monsieur Gilliéron, fils (see Fig. 252).

On the balustrade of the Bath-room, seen to the left in the Figure, is

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[1] *P. of M.*, i, pp. 542–4, and see Fig. 394.

[2] *Ibid.*, i, pp. 541–3, and Fig. 393, and *Phylakopi*, Pl. III in colours (from a drawing by Miss Hogarth, not by Monsieur Gilliéron, père, as erroneously stated in Vol. i, p. 542, note 1).

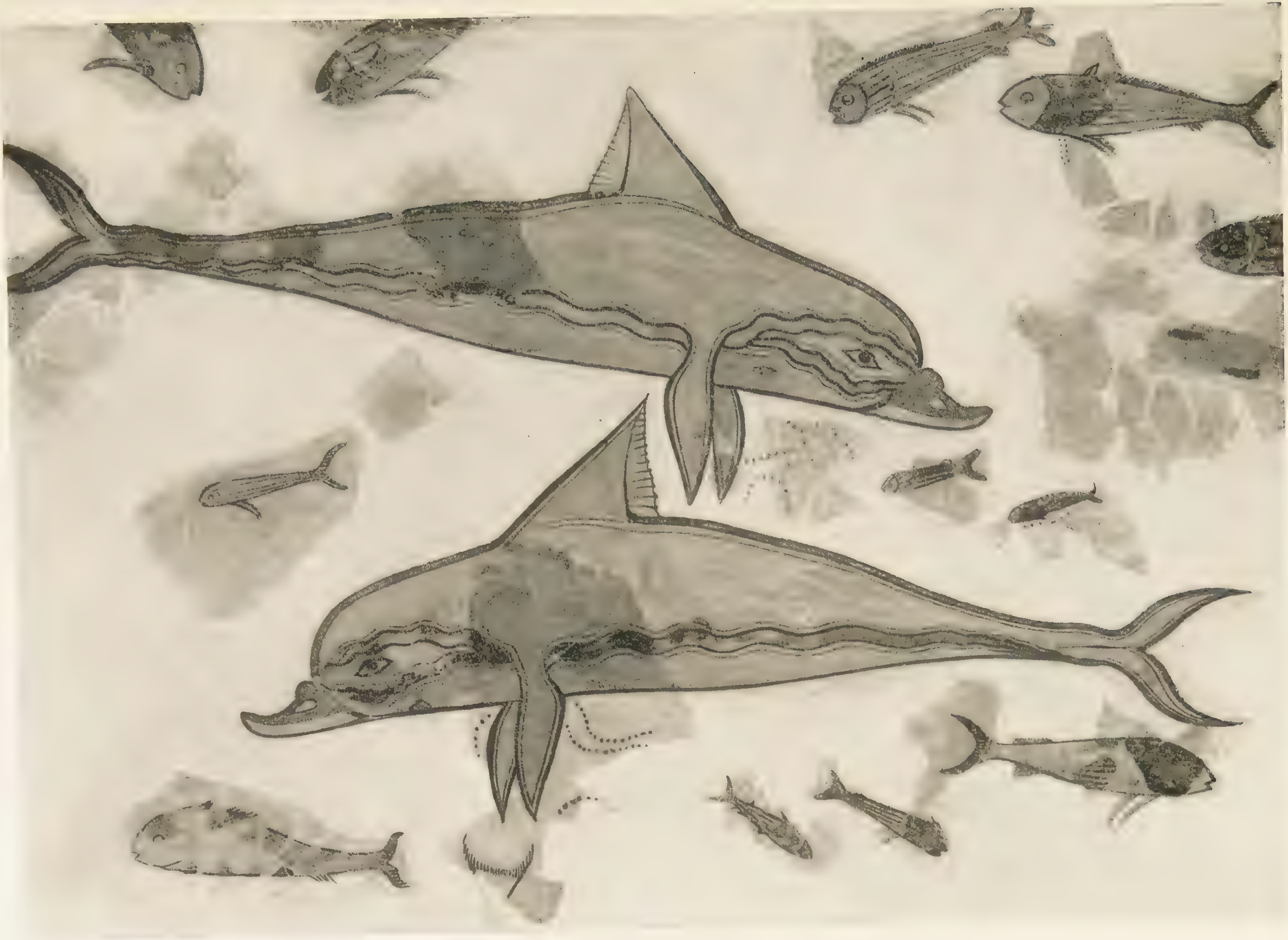

Fig. 251. Fragments of 'Dolphin Fresco' as grouped together.

placed a painted 'amphora', bearing on either side an octopus amidst sponges and seaweeds growing from rocks, illustrative of an early stage of

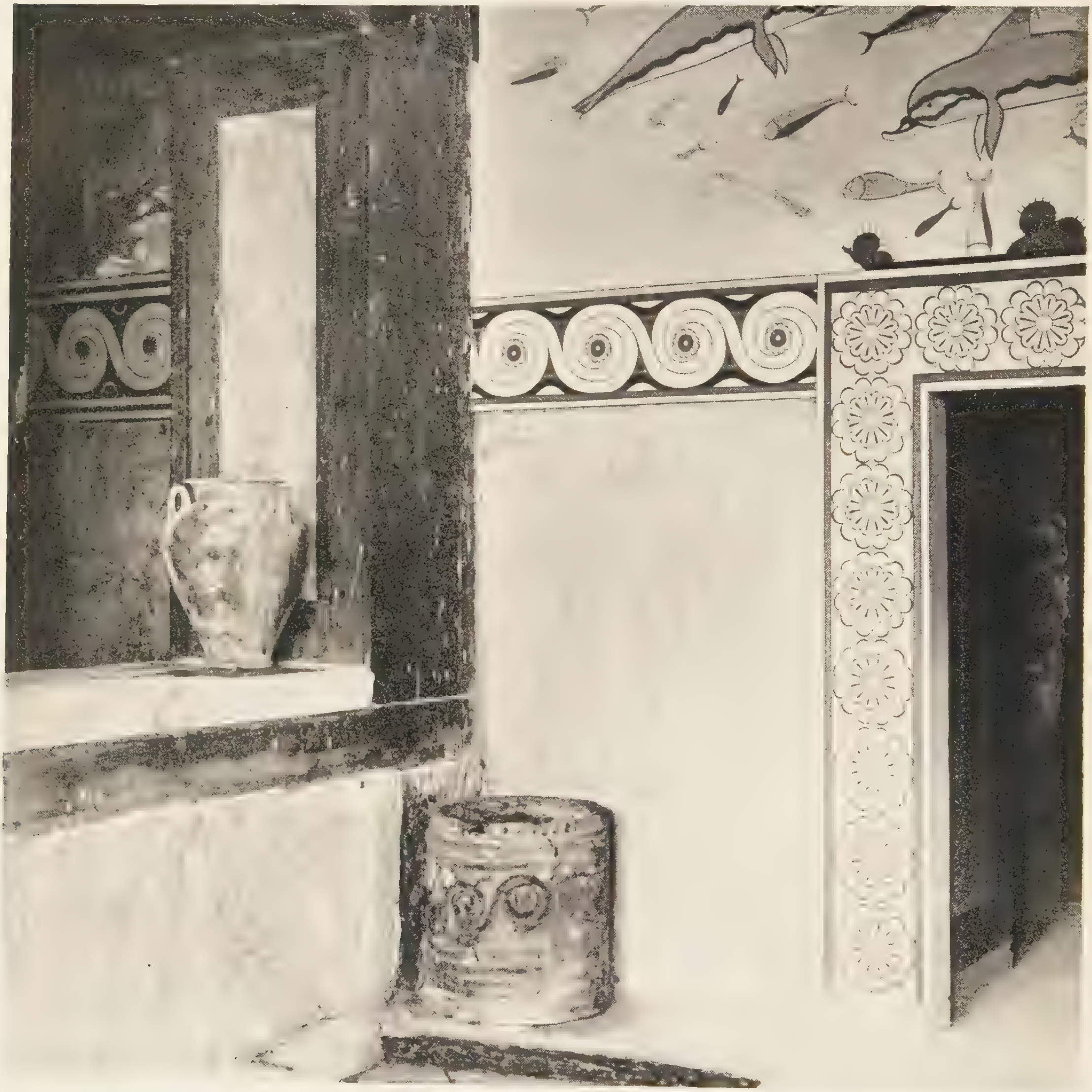

FIG. 252. NORTH-WEST CORNER OF 'QUEEN'S MEGARON' SHOWING DOORWAY LEADING TO 'DOG'S-LEG CORRIDOR' WITH RESTORED DECORATION AND PART OF BALUSTRADE OF BATH-ROOM.

Balustrade of Bath-room.

the later 'Palace Style'. An oblong opening in the neighbouring corner shows where a slab of the gypsum pavement—here dating from L. M. I *a*—has been removed,[1] once more revealing part of the surface of the fine

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[1] Beneath it was, as usual, a deposit about 14 cm. thick mostly containing L. M. I *a* pottery.

‘mosaiko’ floor below, which here runs up to the edge of the balustrade. To the corner beyond has been transferred the clay ‘tub’ with a painted spiral decoration, originally found partly filled with lime,[1] and blocking the entrance of the passage to the South-West of the room. Its original position may well have been in the adjoining Bath-room where it could have served to contain a reserve supply of water. It is to be noted that the dark brown spiraliform design of this vessel is in harmony with the spiral friezes that mark the L. M. I *a* epoch of restoration on this and the adjoining halls and passages. It affords another instance of the manner in which ceramic decorations reflected the prevalent style and motives of the frescoes on the walls. The ‘unities’—to recall the old-fashioned phrase—were as carefully preserved in the furniture of Minoan chambers as in the salons of the First Empire.[2]

Painted clay ‘tub’ L. M. I *a*.

Bath-room of ‘Queen’s Megaron’.

The little bath chamber on which this balustrade opens was entered on the level through a doorway flanked by a pillar and controlled from within, which gave a short passage-way round a further projecting spur of the balustrade. The corner pillar still supported carbonized remains of its wooden column,[3] and this has been restored with flutings in relief, after the model supplied by the more or less contemporary impressions of columns beside the lustral area of the Little Palace.[4] This fluted type of shaft, as noted above,[5] was also prevalent in the Domestic Quarter of the Palace and its borders.

Bath-room of ‘Queen’s Megaron’.

The interior of the chamber, like the adjoining section of the ‘Megaron’, had also been used at a late date for the storage of lime. Its gypsum dado slabs (see Plan and Elevation, Fig. 253, *a*, *b*) were for the most part well preserved, and above them ran the remains of massive carbonized beams. Covering this, but also extending above the upper border of the beams, remains of a painted spiraliform frieze were preserved in position in the North-West corner, and still more fully on the North wall. The spirals themselves contained elegant rosettes—outlined in red on a grey ground, with half-rosettes of the same kind in the intervals. The frieze reproduced

Remains of spiral frieze.

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[1] See above, p. 356.

[2] It should at the same time be remembered that the fresco decoration of walls often remained in position at a time when ceramic remains, especially as illustrated by the smaller vases found on the floor beneath, represented a later artistic fashion.

[3] The charcoal remains as found were roughly circular, about 31 cm. in their greatest diameter.

[4] *P. of M.*, ii, Pt. II, p. 520 seqq.

[5] See above, pp. 322, 323, &c.

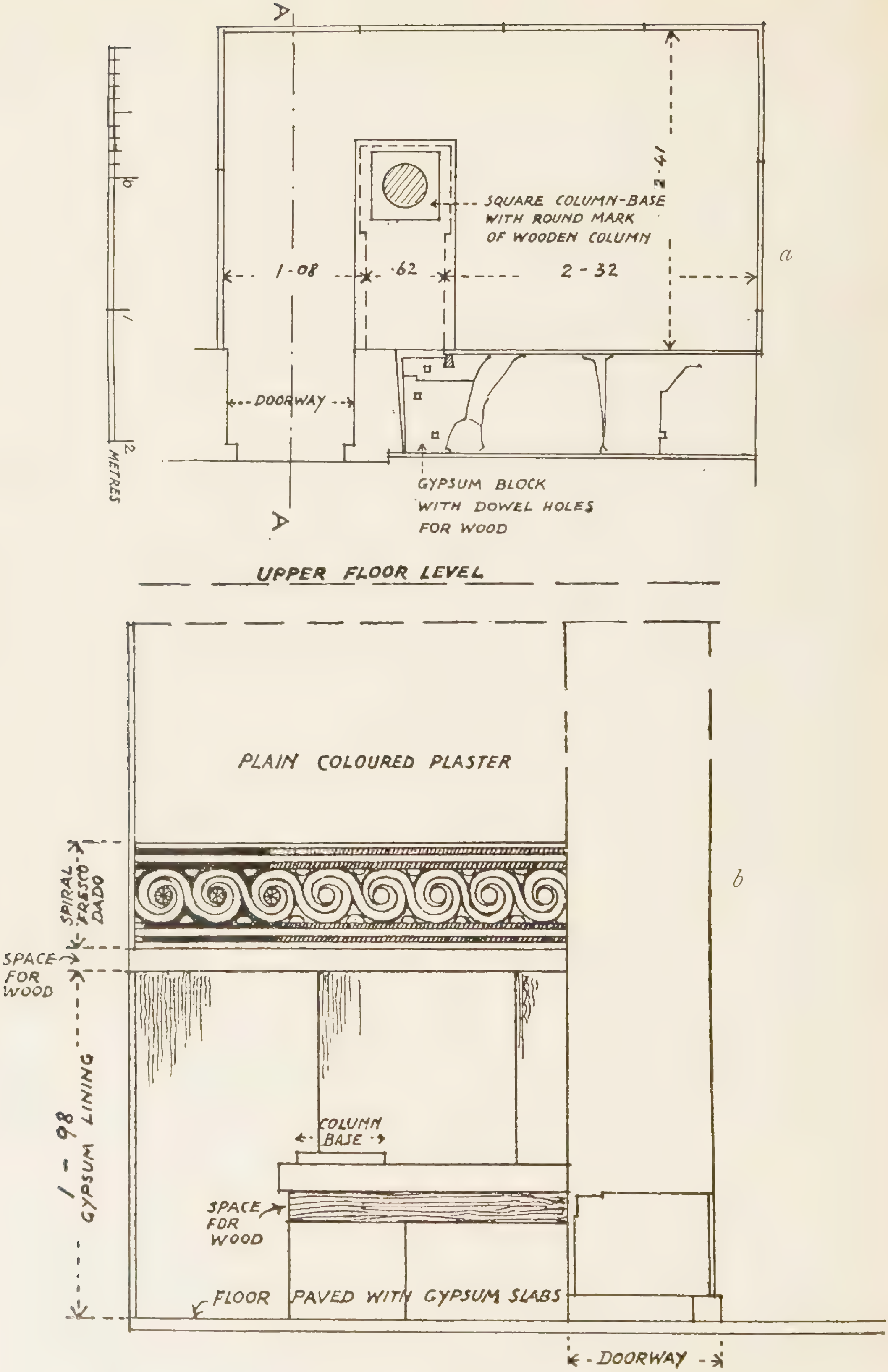
A
A
SQUARE COLUMN-BASE
WITH ROUND MARK
OF WOODEN COLUMN
2·41
1·08
·62
2 - 32
a
DOORWAY
GYPSUM BLOCK
WITH DOWEL HOLES
FOR WOOD
0
1
2
METRES
UPPER FLOOR LEVEL
PLAIN COLOURED PLASTER
SPIRAL FRESCO DADO
b
SPACE FOR WOOD
1 - 98
GYPSUM LINING
COLUMN BASE
SPACE FOR WOOD
FLOOR
PAVED WITH GYPSUM SLABS
DOORWAY

Fig. 253. Plan and Elevation of Bath-room (Theodore Fyfe).

here (Fig. 254) from Mr. Theodore Fyfe's illustration,[1] was nearly half a metre wide (49 cm.), and, owing to its triple border bands, exceeded in dimensions the analogous friezes with running spirals, remains of which were found in the adjoining 'Megaron', and the 'Hall of the Double Axes'.[2] One and all of these and another fragmentary example in the adjoining 'Corridor of the Painted Pithos' formed part, as already pointed out,[3] of an extensive redecoration of this Palace region towards the close of L. M. I *a*, to which the 'Shield Fresco' of the Staircase Loggia, with its similar spiral band, must also be added.

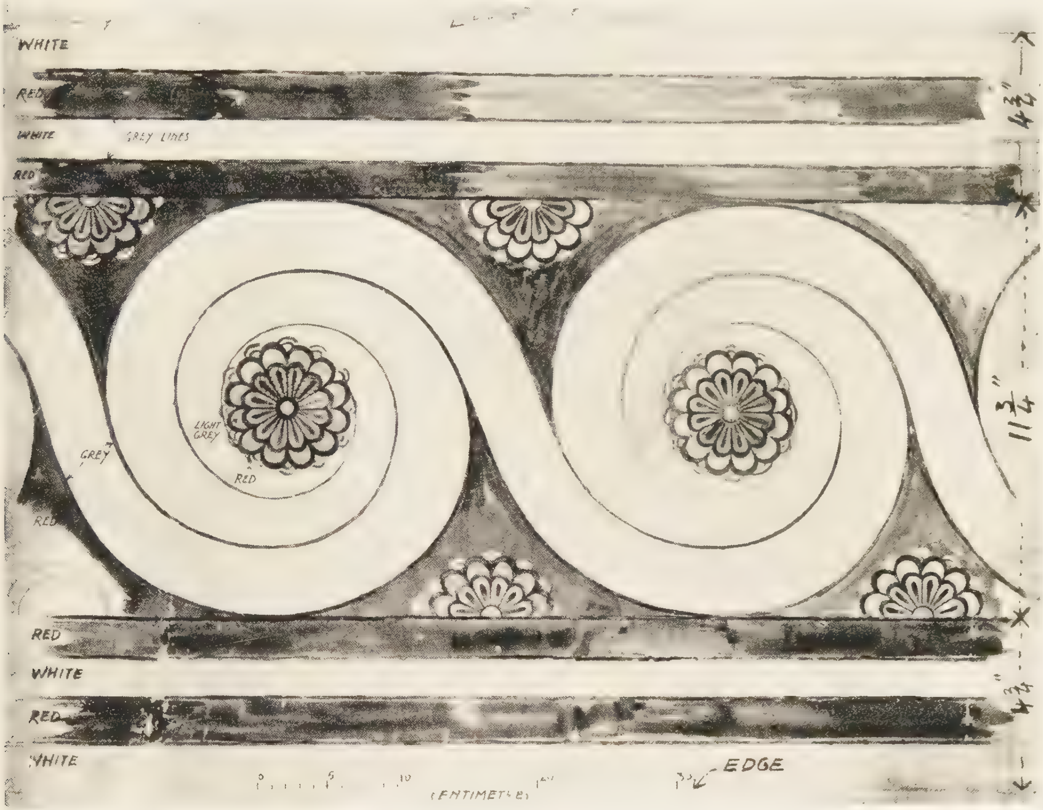

Fig. 254. Section of Spiral Frieze in Bath-room (Theodore Fyfe).

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[1] *Painted Plaster Decoration at Knossos* (*R. I. B. A. Journ.*, x), Fig. 43.

[2] The spiral band itself is 30 cm. in diameter as compared with 27 cm. in the 'Hall of the Double Axes'. In the other case, moreover, the spiral frieze itself is only bordered by single bands so that the total breadth is about 33 cm. as compared with 43 in the case of the Bath-room.

[3] See above, p. 281

Artificial lighting necessary.

The little room itself was lighted only through the opening in the balustrade on its Eastern side, by means of borrowed light from the 'Megaron' beyond. We must also suppose that some kind of curtain could, when necessary, be drawn across the opening. It may be inferred that it was illumined when in use by one or more of the pedestalled stone lamps, of which so many remains were found in the Palace, and one of these—the 'lotus' lamp illustrated above[1]—has accordingly been placed on the coping of the side balustrade.

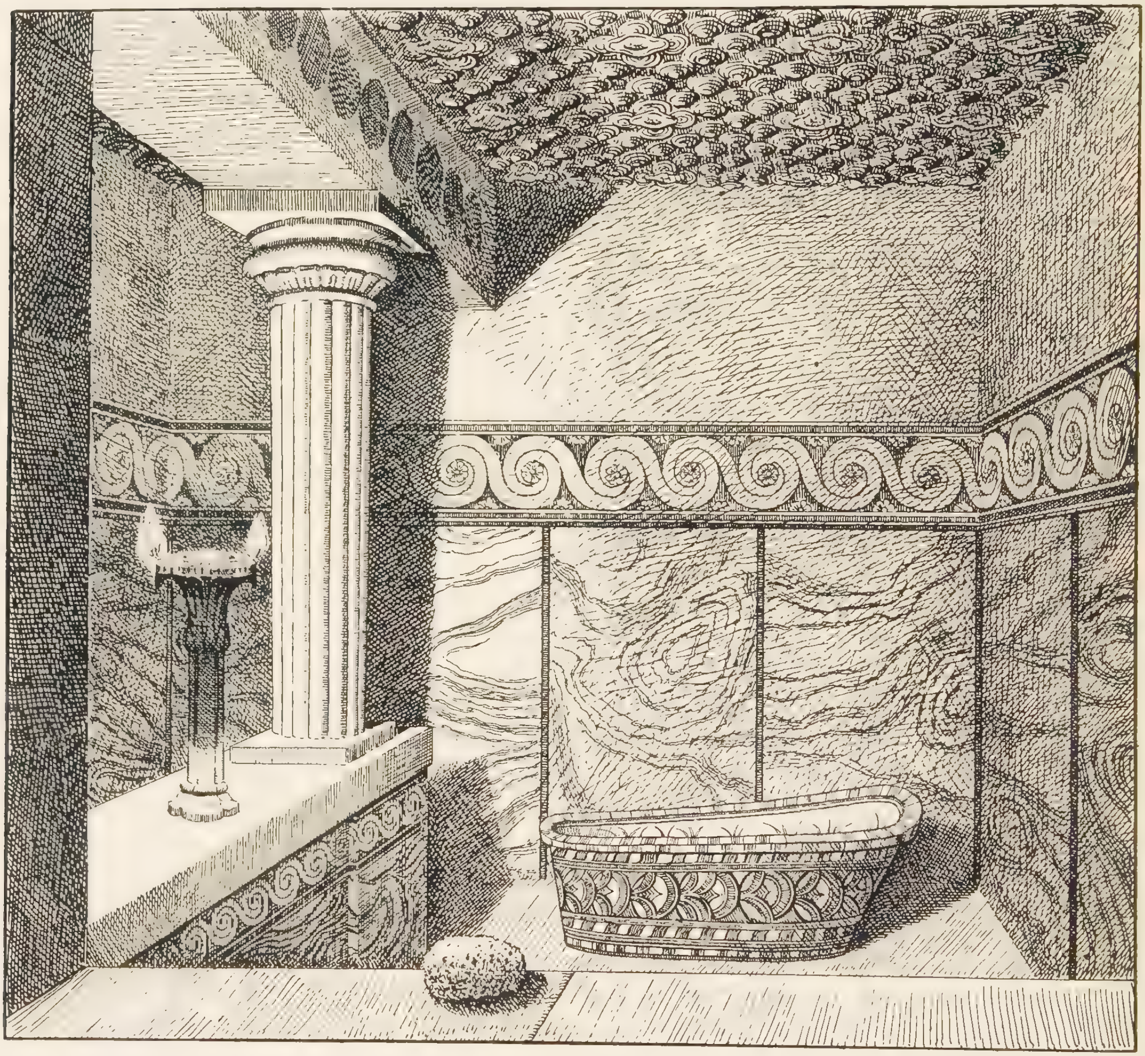

FIG. 255. RESTORED VIEW OF BATH-ROOM WITH L. M. II BATH WITHIN.

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[1] See above, p. 27, Fig. 14, *a*, 1 and 2.

Painted clay bath: L. M. II.

The function of this small chamber—the interior section of which was only a little over two and a half metres square [1]—was clearly indicated by the discovery by its entrance, and in the adjoining section of the 'Megaron', of remains of a painted clay bath that had been evidently thrown out at the time when the floor had been made use of for the storage of lime. It is shown reconstructed in what was probably its original position in Fig. 255, and a detailed drawing is given in Fig. 256. As will be seen from this its exterior decoration is a characteristic example of an advanced phase of the L. M. II ceramic style. Its central band repeats an ornamental derivative of a 'papyriform' motive: the waved striations above and below this themselves originate in veined stonework. In the interior are traces of designs of tufts of reeds, and that this is an old tradition of Minoan baths appears from the similar clumps that adorn the exterior of the bath-tub of M. M. III *b* date, found in the little room near the 'Magazine of Lily Vases'.[2] As in the case of the reeds and swimming fishes painted inside the 'wash-basins' of Phylakopi,[3] and again in the grasses round the Minoan flower-pots described above,[4] the decorative motive has a special appropriateness to the object itself.

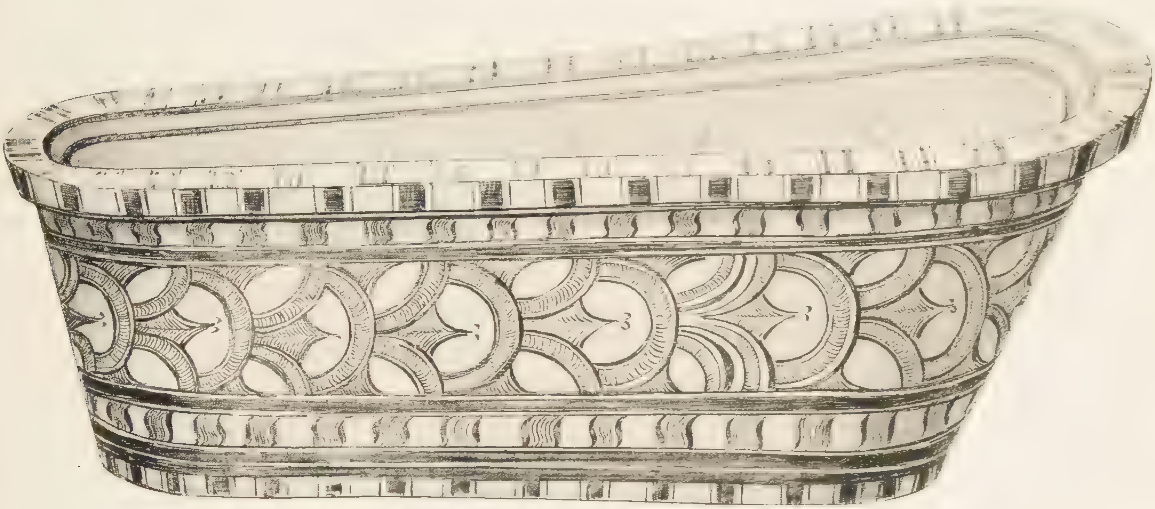

FIG. 256. PAINTED TERRA-COTTA BATH OF LAST PERIOD OF THE PALACE (L. M. II), PARTLY RESTORED. (INTERIOR MEASUREMENT, LENGTH, ABOVE 1·295 M., BELOW, 1·04 M.; GREATEST HEIGHT 50 CM.)

Reed decoration on baths.

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[1] 2·32 metres N.-S. by 2·41 m. E.-W. (see Plan, Fig. 253).

[2] *P. of M.*, i, p. 580, Fig. 424, and see below, Fig. 257.

[3] For the Melian 'washing basins' see *Phylakopi*, p. 140, Figs. 112, 113. (Cf. *P. of M.*, i, p. 598.)

[4] See above, pp. 278, 279 and Figs. 186, 187.

The patterns outside the bath, as shown in Fig. 256, stand in a close relation to those that appear on an 'amphora' belonging to the same advanced 'Palace Style' derived from a great Hall on the Western borders of the building, and reproduced in Fig. 258. The ceramic phase here represented belongs to the latest palatial epoch, and something of the pathos of history cannot but be evoked by the fact that the bath, thus associated with the annex to this inner hall of the Domestic Quarter, had been placed within it only a little before the final disaster that terminated the existence of the building as a royal abode.

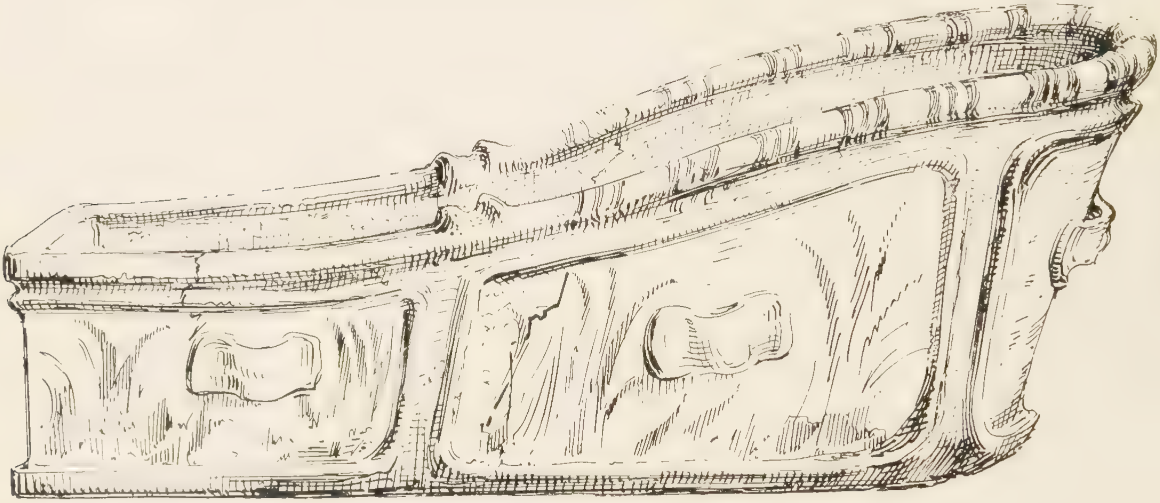

FIG. 257. PAINTED TERRA-COTTA BATH (M.M. III *b*), FROM ROOM NEAR 'MAGAZINE OF THE LILY VASES'. LENGTH 1·45 M.

Comparisons with M. M. III bath.

As compared with the earlier bath, here reproduced in Fig. 257, the present example is of heavier and less elegant proportions. It is 1·295 metres in length, the other being 1·45. Both are hip-baths, but while the outer line of the M. M. III bath rises about 20 centimetres by a gentle slope from its foot end to the other which is half a metre high, the walls of Fig. 256 show only a slight incline upwards, and that in a straight line. One marked difference in the latter is the absence of the double groove on the two rims that forms such a noteworthy feature in Fig. 257. It looks as if it had been used to keep in position a cross-bar from which, as in a modern bath, had been hung some object useful to the person seated within it.

Bath-water obtained and disposed of by hand labour.

Unlike the case of the remarkable bath-room of Mycenae, with its monolithic floor, no sink was here perceptible, and the bath must both have been filled and emptied by means of hand labour. This in itself argues a plentiful staff of servants at the beck and call of the Minoan lords and ladies.

There was, however, a sink in a 'Toilette Room' at the back, about a score of paces distant, and not improbably a water supply from the cistern there located. For this little contiguous Bath-room did not by any means exhaust the sanitary and other conveniences to which the 'Queen's Megaron' had access.

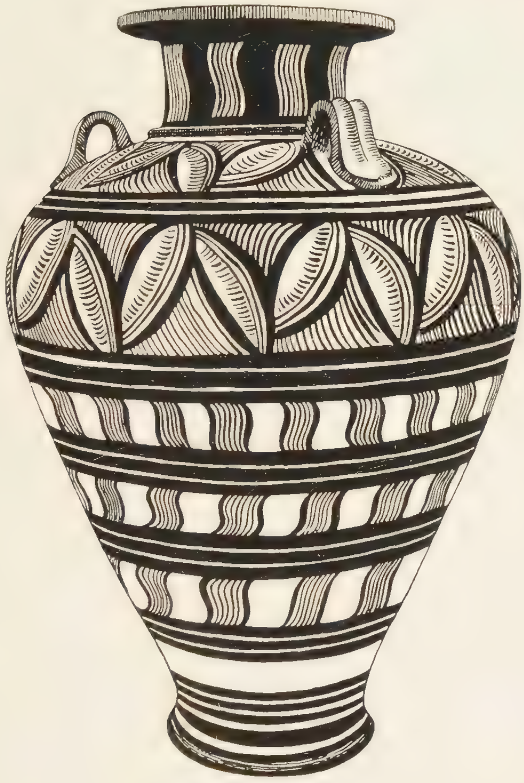

FIG. 258. LATE 'PALACE STYLE' AMPHORA WITH DECORATION SIMILAR TO THAT OF THE BATH.

'Toilette Room' and Latrine at Back and Connecting Corridor.

Passage to 'Toilette room' and sink.

A short cut to the private room in question was supplied by a passage opening immediately South of the 'Bath-room' doors, called, from the tub-like vessel there found blocking its entrance, the 'Corridor of the Painted Jar'. Remains of the wall-painting of this passage-way were found at its Western end, showing that it had been decorated with the same system of spiraliform bands that was met with in the adjoining Halls and the Bath-room itself. The remains of the spiral band, since unfortunately fallen and disintegrated, were on a lower level than in the other areas, the base line of the frieze, as will be seen from Mr. Fyfe's original drawing, Fig. 259, being only 62 centimetres above the pavement level.

Recurrence of spiraliform band.

'Toilette Room' and latrine.

At the point where the remains of this frieze were found the Corridor turns at right angles, opening immediately into an inner room lighted from the little 'Court of the Distaffs'.[1] This room, which has been already described, derives its chief interest from the narrow closet that projects from its East wall which served as a latrine, evidently flushed by water, and curiously anticipating modern sanitary arrangements.[2] In a pavement slab of the room immediately outside the door of the latrine is the semicircular opening of a sink communicating with the drain beyond. It was here probably that the bath-water was disposed of, but the sink was doubtless used for the purposes of the room itself. In view of other analogies such as, for instance, the low plaster 'sideboard' along the back wall of the little kitchen behind the 'Room of the Throne', it seems most probable that the plaster dais that occupies the South-West angle of this chamber (see Fig. 260) was used not as a couch (according to the original suggestion)[1] but as a support for vessels such as ewers and washing basins. In view of this probability it seems preferable to give this room the name of 'Toilette Chamber'.

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[1] See *P. of M.*, i, pp. 333, 334, and Fig. 243.

[2] *Ibid.*, pp. 228–30, and Fig. 172.

Plaster dais.

Great stone water-shafts in wall—possible cistern.

The whole of the interior of the South wall of this Chamber was occupied by two great shafts by which the rain-water from the roof of this part of the 'Domestic Quarter' reached a main line of built drain below.

The shafts themselves stood in relation to two small latrines serving rooms on the upper floor, but there is also a very considerable oblong space between the two that is unaccounted for and seems to be best explained by the former existence of a cistern, supplied above by a separate channel. In this case there may well have been some direct water supply by means of a pipe opening in the South-East corner of the 'Toilette Room'. The little private 'Court of the Distaffs', into which this chamber opened on its North

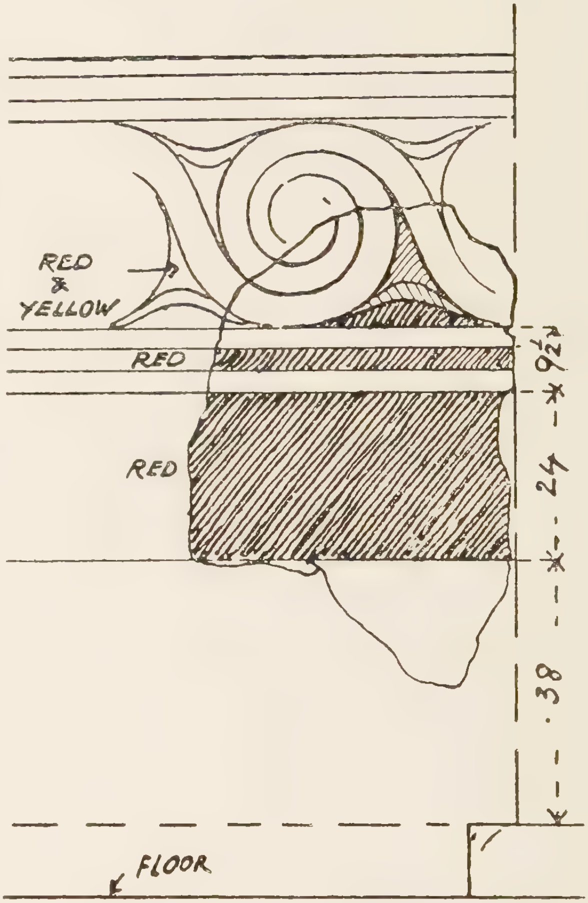

Fig. 259. Elevation of Corridor Wall showing Spiral Frieze.

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[1] In accordance with this view this area was originally named the 'Room of the Plaster Couch', it being thought that the platform might have served for a guardian's couch. It appears as the 'Room of the Plaster Couch' in the original plans and in my *Knossos, Report*, 1902, pp. 62–4.

side both by a door and a window, must have also greatly added to its usefulness.

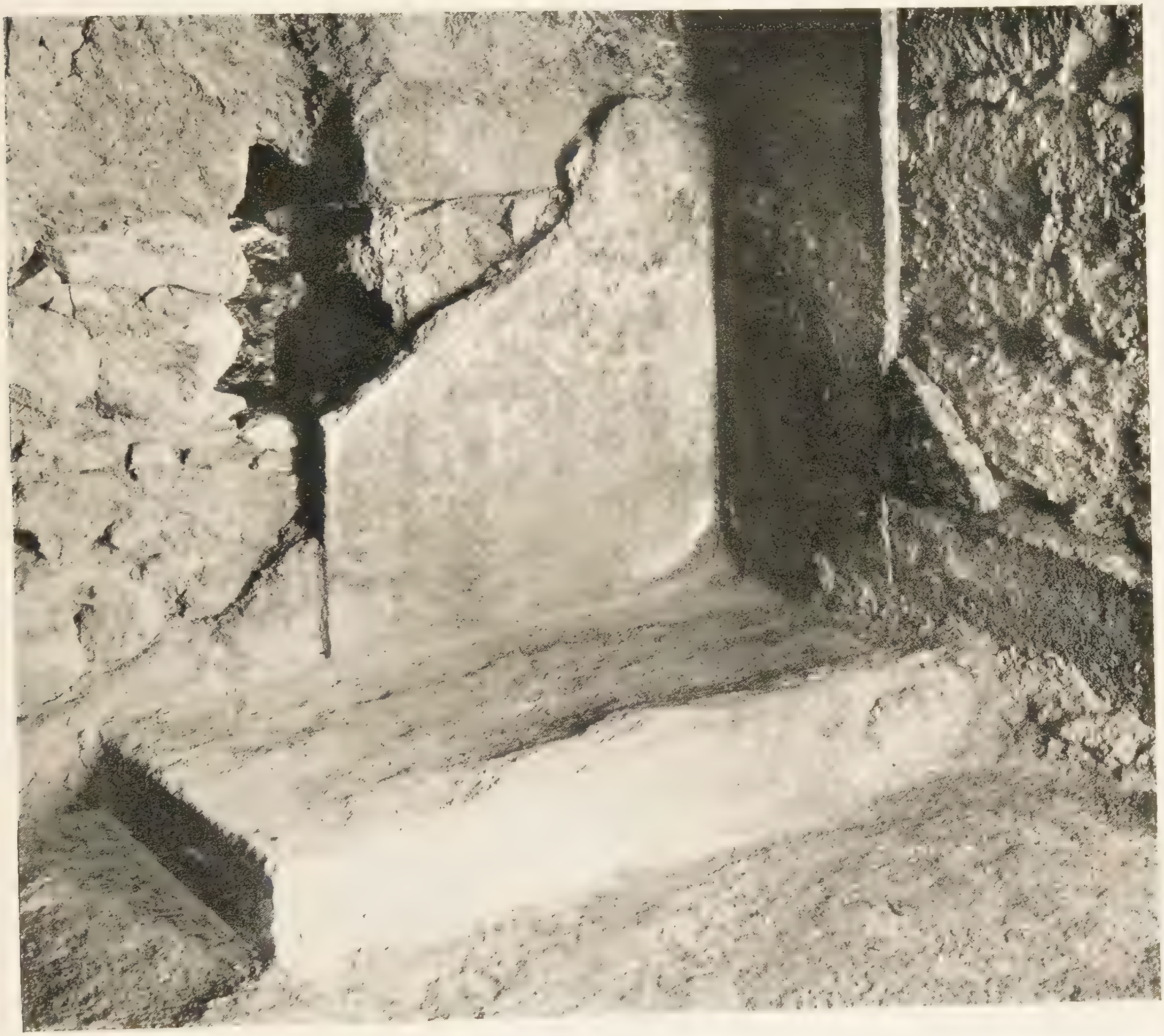

FIG. 260. 'TOILETTE ROOM', SHOWING PLASTER STAND.

The 'Queen's Megaron' as a Social Centre.

Exceptional conveniences of 'Queen's Megaron'.

With its private staircase leading to a secluded 'withdrawing room' and bedrooms above, the Bath-room adjoining it and the short passage bringing it into direct connexion with the 'Toilette Chamber' and the little Court beyond, the 'Queen's Megaron',—more than any other hall or chamber of the Palace,—was surrounded with conveniences, carefully devised and scientifically worked out. The open 'pillar screen' that divided it into two compartments and the two little enclosed light-areas on its front and sides secured not only a good supply of fresh air but a diffused, reflected lighting, the effect of which, indeed, has been to a quite exceptional extent recovered by the restoration of the upper structures. So, too, its social capacities were enhanced by the unique disposition of benches.

Ideal interior view.

In the ideal sketch given in the Frontispiece, an attempt is made to reproduce its general appearance, and something of the life within it as it may have appeared early in the 'New Era'. Some latitude, indeed, has been allowed in it as to the exact limits of the period represented. The seated ladies here introduced still represent the costume of the 'Miniature Frescoes'. A contemporary survival of the 'Marine Style' of the 'Dolphin Fresco', with decorative elements that coincide with the spiral friezes, has here been admitted—a phenomenon suggested by the actual remains. Here, again, the religious element is represented by the sacred Double Axe rising from its stepped base, set to the right on the coping of the pillared stylobate—in this case almost exactly in the position in which it was actually found.

For conversation the room was ideal, with its seats both back to back and at right angles to one another, and there can be little doubt that games were also played here, such as in the case of the earlier 'East Hall' seem to be implied by the discovery of the 'Gaming Board'[1] on the Northern border of its area.

Pavement Games.

Holes for game on pavement slab.

An actual evidence of such diversions, though more probably connected with the hall in its earlier phase, came to light in the South-East corner of the Eastern light-area. Here lay a slab of hard limestone, resembling the *ἀμυγδαλόλιθος* of the M. M. II pavement, with a broken edge giving it a roughly trapezoid outline and presenting a half-circle of 7 holes, two of them double. When completed, as shown in the sketch, Fig. 261, it would have consisted of a circle consisting, apparently, of two segments of five small cups opposite to one another and separated on either side by double cups of larger size. The mean width of the circle was almost exactly a third of a metre, the diameter of the smaller holes ranging to about 4·2 centimetres. That this should be regarded as representing some kind of game played on the pavement seems to be the natural conclusion. Variant examples of such objects have been found, some of them very rude and made out of irregular pave-

Parallels from elsewhere.

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[1] *P. of M.*, i, p. 472 seqq. and Coloured Pl. V.

ment slabs, of which two examples were found at Mallia.[1] Imperfect traces of a similar arrangement were noted by me also on a large slab of the South-East external stepway at Knossos.

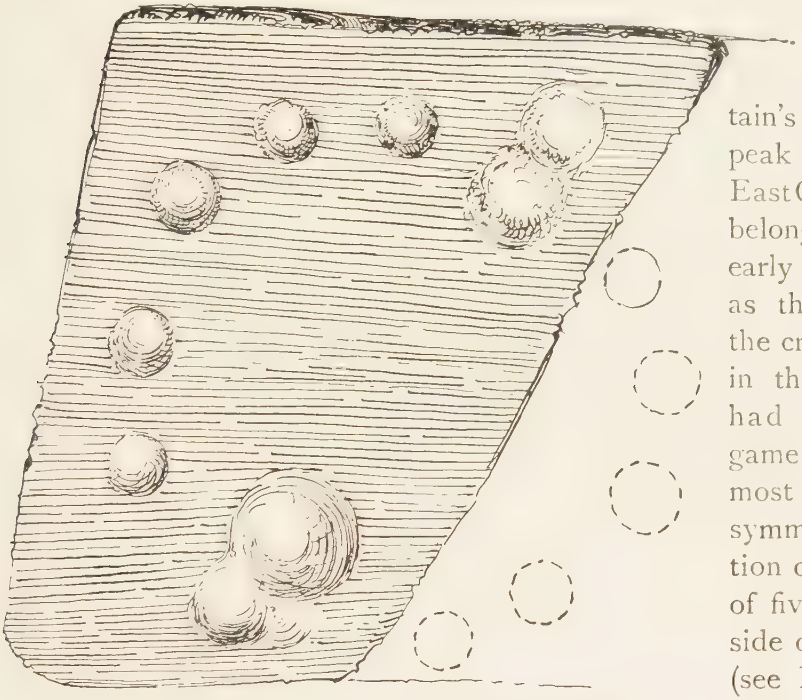

FIG. 261. CUPPED SLAB FOR PAVEMENT GAME, 'QUEEN'S MEGARON'.

The Kavusi Table.

An interesting parallel is presented by a slab of 'shale' found in Room I of the almost inaccessible Chieftain's residence on the peak above Kavusi in East Crete,[2] and clearly belonging to the same early Geometrical Age as the settlement on the crags below. That in this case the slab had served for a game is rendered almost certain by the symmetrical opposition of the two groups of five holes on each side of a dividing line (see Fig. 262). Each hole has an incised circle round it, and two cross lines are seen about the centre of the groove of division. The chevron decoration, it is to be observed, seen on one edge of the face of the slab—itself a good deal damaged—fits in well with its Geometrical date.

The comparative material at hand shows that the arrangement constantly varied. The number of small holes in the circle ranges in the known examples from 10 to 39. Sometimes there is a central cup, in other cases it is absent. In the Knossian specimen we see two double holes, and at times there is a hole contained in a side projection.

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[1] One found during the earlier exploration conducted by Dr. Hatzidakis was cut in an irregularly oblong slab. In another case the slab was pentagonal. In the first case there were numerous small holes arranged in a roughly oblong shape, with a larger 'cup' in the centre. The pentagonal slab presented a regular circle of ten holes, without the central cup, but with a semicircular hollow on one side.

[2] Margaret A. Boyd (Mrs. Boyd Hawes), *Excavations at Kavousi, Crete, in 1900* (Am. School of Classical Studies at Athens), pp. 141–3 and Fig. 7. The slab has a diagonal of about half a metre, and is 0·115 metre thick. The clay counter found in the same chamber does not seem to belong to the slab.

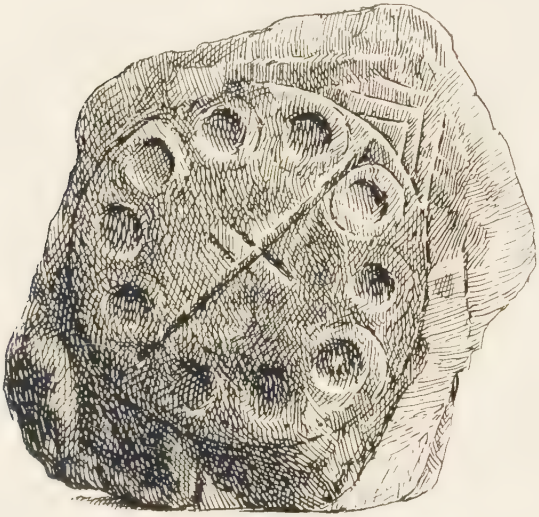

FIG. 262. CUPPED SLAB FROM ROOM 1 OF CHIEFTAIN'S RESIDENCE, KNOSSOS.

But of all the objects of this class the most complete and finely executed specimen is that brought to light by the French explorers at Mallia. It formed a block by itself in the form of a thick disk of hard limestone 90 centimetres in diameter and 36 cm. thick. Round its circumference were 34 cups, one larger than the others, on a kind of projecting ear (see Figs. 263, and 264 B, p. 396), while in the centre was a larger bowl 15 cm. wide and 8·5 cm. deep.

The Cupped Table of Mallia.

As Monsieur Fernand Chapouthier has pointed out[1] in his exhaustive account of the Mallia table, it derives special interest from the position in which it was found, near the South-East corner of the Central Palace Court. It was set on a small terrace, bordering a broad stepway on the North leading from the Court to the upper story, and behind it and in symmetrical relation with it was a low stone bench, while, opening on the terrace from the South, was a small one-columned Portico (see plan, Fig. 264 A).[2] Under such circumstances, from its permanent and prominent position, it was quite natural for him to assign to this Cupped Table a religious significance as a 'Table of Offerings',[3] stress being laid on the central bowl, analogous to the clay 'Libation Table' set into the pavement of the early *Sacellum* at Phaestos,[4] where the only cavity was that in the middle. M. Chapouthier further compares the well-known *kernoi* of Phylakopi and similar types found at Eleusis, and cites Athenaeus'[1] account of such clay vessels as representing groups of cups for holding various types of grain and other produce, including honey-cake and milk—offerings resembling the πανσπερμία.

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[1] The actual discovery was made by Messieurs René Joly and Robert Flacelière in 1926. (See *Bull. de Correspondance Hellénique* 1926, *Chron.*, p. 576.) It has been since admirably illustrated and described by Monsieur Fernand Chapouthier in *Bull. de Corr. Hell.*, 1928, pp. 1–32: *Une table à offrandes au Palais de Mallia.* Fig. 264 B is reproduced from the photographic representation, p. 8, Fig. 6.

[2] Reproduced from Chapouthier, *op. cit.*, p. 5, Fig. 3.

[3] *Op. cit.*, pp. 15, 16.

[4] L. Pernier, *Mon. Ant.*, pp. 407–10, and Pl. XXXIV.

Game rather than Libation Table.

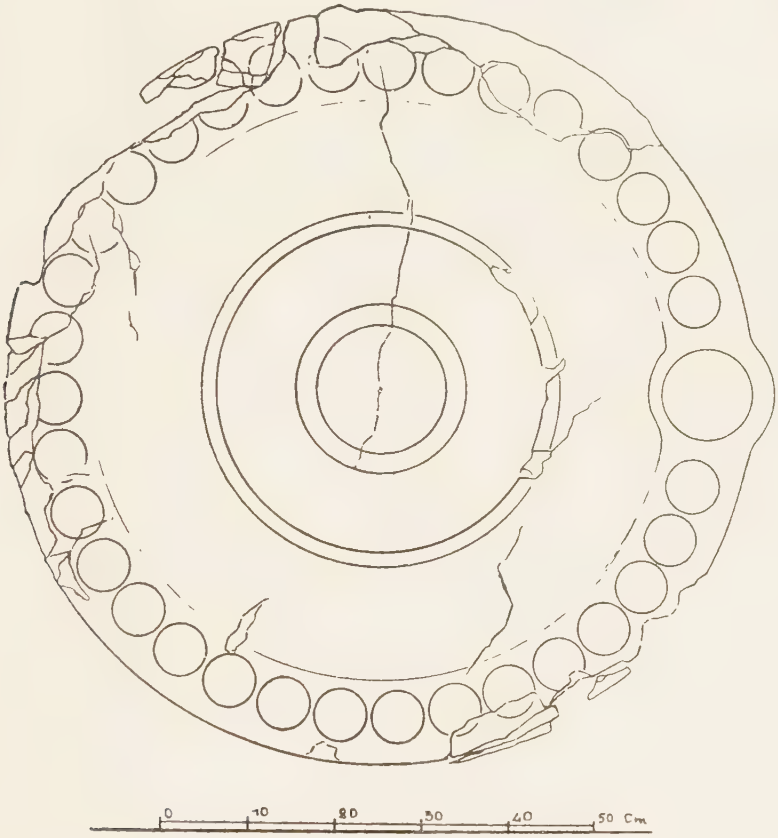

FIG. 263. CUPPED TABLE EMBEDDED IN PAVEMENT OF MALLIA PALACE. F. CHAPOUTHIER.

The possibility that, as in other cases, the form of the game itself may have reflected a religious prototype cannot be altogether set aside. Many indeed might prefer to see in the Table of Mallia with the adjacent bench and the small columnar chamber fronting it, an object of cult rather than a mere appendage of a 'salle de jeux'.

It must still be observed, however, that the central bowl itself is quite consistent with certain forms of games. In the Egyptian game of the 'bowl' or 'vase', for instance, where the board was arranged in concentric circles[2] it seems natural to suppose that the vessel itself, which may have contained the stakes or the pieces that had come home, was placed in the middle.[1] A central bowl, too, is seen in another and ruder slab found by Dr. Hatzidakis at Mallia,[2] with shallow cavities forming an irregular oblong round it, which certainly has the appearance of a pavement game. It looks as if the double cups of larger size on either side of the slab from the 'Queen's Megaron' may have fulfilled a function similar to that of the central bowl and the larger cup of the Mallia Table.

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[1] Athen. xi. 476 *e.*

[2] See E. Falkener, *Games Ancient and Modern and how to play them* (Longmans, 1892), p. 83 seqq. and pp. 359, 360.

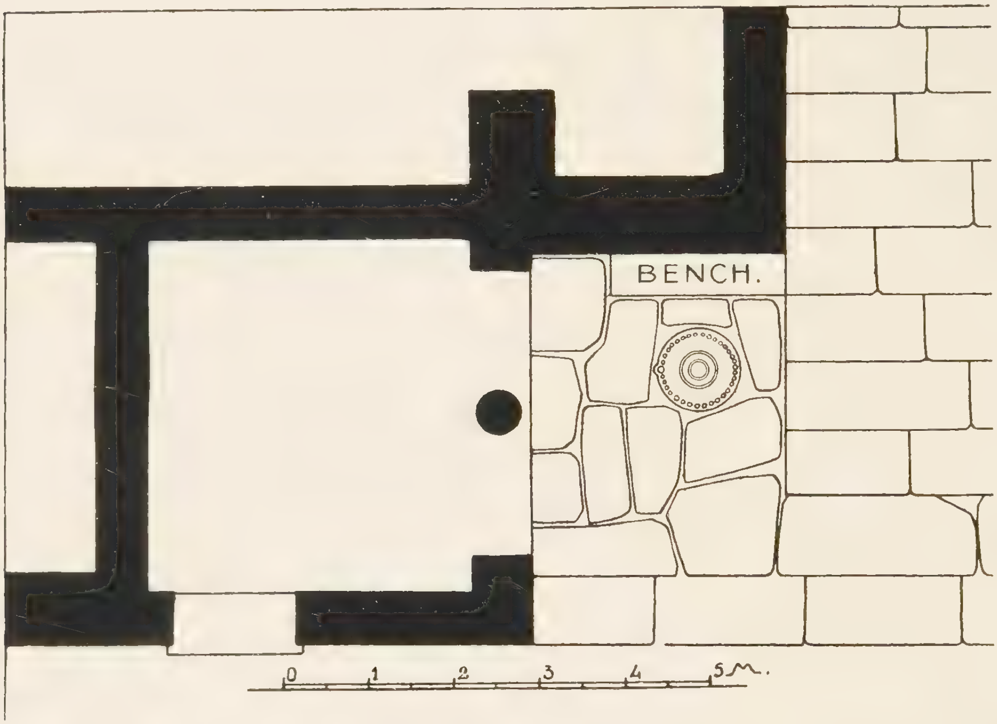

FIG. 264 A. PLAN OF PLATFORM NEAR SOUTH-WEST CORNER OF CENTRAL COURT AT MALLIA SHOWING POSITION OF CUPPED TABLE WITH BENCH BEHIND.

But, indeed, it may well be asked if, from the Minoan point of view, the permanent placing of a gaming table in a convenient angle of the Palace-Sanctuary was otherwise than a natural arrangement. Remains of a draught-board, as has been shown, were found in the Temple Repositories at Knossos. Gaming boards were as appropriate to the divinities as they were to their deceased human possessors whom they followed to the grave. There is no reason why such a diversion should not have been permanently provided for the Priest-Kings of Mallia.

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[1] See E. Falkener, *op. cit.*, p. 83 seqq. and pp. 359, 360, *The Game of the Bowl.*

[2] Πρακτικά, 1915, p. 122. (See note 1, p. 391 above, and cf. Chapouthier, *op. cit.*, p. 11, where an improved representation of this Cupped Table is given in Fig. 9.)

That, as in the case of the draught-boards, the pavement games were played by means of some kind of dice is clear. The pieces themselves may well have been usually pebbles, like the Greek *πεσσοί*.

In this connexion the Kavusi Table has a special interest. Its lineal derivation from the much earlier Minoan type found in the 'Queen's Megaron' can hardly be gainsaid, the cups on the opposing sides—in the former case separated by a kind of *ἱερὰ γραμμή* —being in each case five. But the Kavusi Table, though its possessor may well have been of the old Eteocretan stock, belongs to a time when a great part of the Island was already in Hellenic hands. With some Late Minoan accretions, such as the debased stirrup vases, the culture with which this pavement game was associated was of a Geometrical Greek type, and we may therefore suppose that the new-comers may themselves have taken over this evidently popular game from the older inhabitants. The possibility, then, is not excluded that the game played with pebble pieces by the Suitors, seated on the ox-hides in front of the doors of Odysseus' house in Ithaca, was of this kind.[1]

Later evidences of pavement games.

The most reasonable conclusion seems to be that in all these cases we have to do with a pavement game. The numerous and constantly varying types of similar objects, some of which, like the Knossian example, show no central cup, agree better with this than with a 'Table of Offerings'. The much later scratched circles with small cups at intervals that have often been noted in the pavements of buildings by the Roman Forum afford, indeed, a close analogy.[2] On the other hand, the recurrence of the palm and Ᵽ signs that appear on some of these, as upon the 'contorniates' [3] or ancient counters for games, clearly marks the cups and circles of the Roman pavements as *tabulae lusoriae*.

On the Southern steps of the 'Theatral Area' at Knossos, as well as at Phaestos, there are plentiful traces of a Minoan game of a similar kind in which the cups are arranged in parallel rows so as more or less to form a square.

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[1] *Od.* i. 106, 107:

> Οἱ μὲν ἔπειτα
> πεσσοῖσι προπάροιθε θυράων θυμὸν ἔτερπον.

The suggestion was already made by Miss Boyd, *op. cit.*, who was, however, unaware of the Minoan derivation of the game.

[2] See especially George Dennis in E. Falkener, *op. cit.*, pp. 364–6: especially Figs. 3 and 4. The radii there shown are absent on other similar examples. Cf. Becq de Fouquières, *Les Jeux des Anciens.*

[3] See, especially, Froehner, *Annuaire de Numismatique*, 1894, p. 88, &c.; and cf. Katharine A. McDowall (*Num. Chron.*, 1906, p. 232 seqq.): *Contorniates and Tabulae Lusoriae.*

Fresco Design of Boys playing Pavement Game.

Miniature fresco showing boys playing game.

A remarkable painted stucco fragment, for the first time reproduced in the Coloured Plate XXV above, from the waste heap near the North-West Portico, may be even thought to afford a glimpse of some kind of game of this kind as played by the Minoan youth. It is on the 'Miniature' scale showing parts, apparently, of four boyish figures, depicted in the red hue of the male sex on a white ground. Below are visible two of the horizontal thread marks used by the Minoan artists as a guide for the brush. The figures are so slimly executed that they can only be those of children, and they do not even seem to have arrived at the age when the belt was first worn.[1] Their action is lively, as if they were engaged in play, and the central figure is shown half kneeling with the arm that is visible resting on the ground. To the right of this is seen the lower part of another boy squatting, but beyond this the indications are insufficient. From the attitude of the principal figure the interest would appear to centre on the pavement below. Here surely we have a sketch of a Minoan pavement game by a contemporary artist.

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[1] See below, p. 444 seqq.

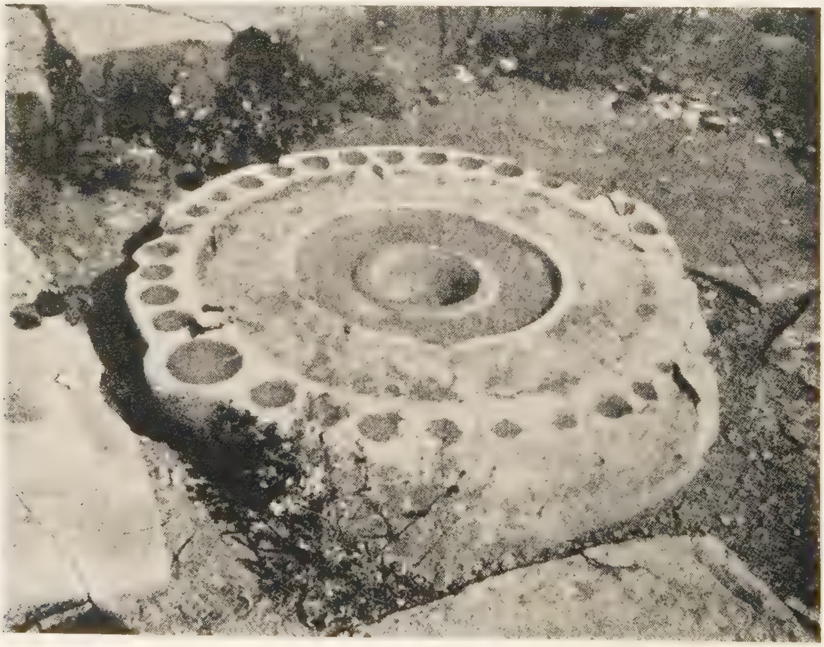

FIG. 264 B. VIEW OF MALLIA TABLE EMBEDDED IN PAVEMENT.
F. CHAPOUTHIER.

§ 85. East Treasury (later, Archives) and Derivative Relics: Bone Fish with Alphabetiform Signs.

*Windowless chambers for Stores and Treasure; 'The Lair'; Early 'kalderim' pavement below with contemporary door-jambs; Clay and plaster floors (M. M. III) of later store-room; Relics fallen from Treasure Chamber above; Extension of deposit under Stairs—'The Ivory Deposit'; Parallel stratification under Stairs; M. M. III*b *pedestalled Vases at top—their Egyptian pedigree; Fragments of Miniature Fresco found with 'Ivory Deposit' relating to Bull Sports; Upper Treasury Chamber later used for Archives—sealings and tablets of Linear Class B; Relics from 'Treasury' also found in 'Room of Stone Bench'; Faïence plaques as from 'Temple Repositories'; Parts of Ivory Casket and Wooden Chest; Rock-crystal bowl; Pendant in form of gold heart—similar amulets; Gold fish—*Scarus Cretensis*; The lion jewel; Deposit in Drain Shaft; Bone 'fish' with alphabetiform signs; Simple geometrical character of such signs; Inlayers' signary; Accompanied by varying numbers; Segments of bracelets with similar marks and numbers; Were both classes of objects used for game?*

Windowless chambers for stores and treasures.

This most private Section of the 'Domestic Quarter', to which the 'Queen's Megaron' with its dependencies including the 'Toilette Room' belongs, together with the corresponding 'thalamos' system above, wraps round, as it were, both on the lower and upper floor, a windowless chamber such as would seem naturally designed for stores or archives. These secluded spaces were in each case only approached by a doorway opening from the passage that borders this section on the North Side. (See Fig. 265, over page, and cf. Fig. 266 and Plans E and F in the Cover at the end of this Volume.)

'The Lair'. Early 'kalderim' pavement below.

Mention has already been made of the lower of these rooms in the preliminary survey of the 'Domestic Quarter' given in the First Volume of this work.[1] At the time of its first discovery it was jocosely known as 'The Lair'. Its original flooring, consisting of massive limestone blocks and belonging to the 'kalderim' class,[2] was simply an extension—at practically the same level—of the earliest pavement visible in the 'Queen's Megaron' and bath-room. Along its Western border this pavement was underlain by

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[1] *P. of M.*, i, p. 325 seqq.

[2] In my original Report (*Knossos, Excavs.*, 1902; *B.S.A.*, viii, p. 68) it was mistakenly suggested that the great blocks of this pavement had a special precautionary significance in relation to the Store Room, and were to prevent the entrance of robbers by the great built drain below.

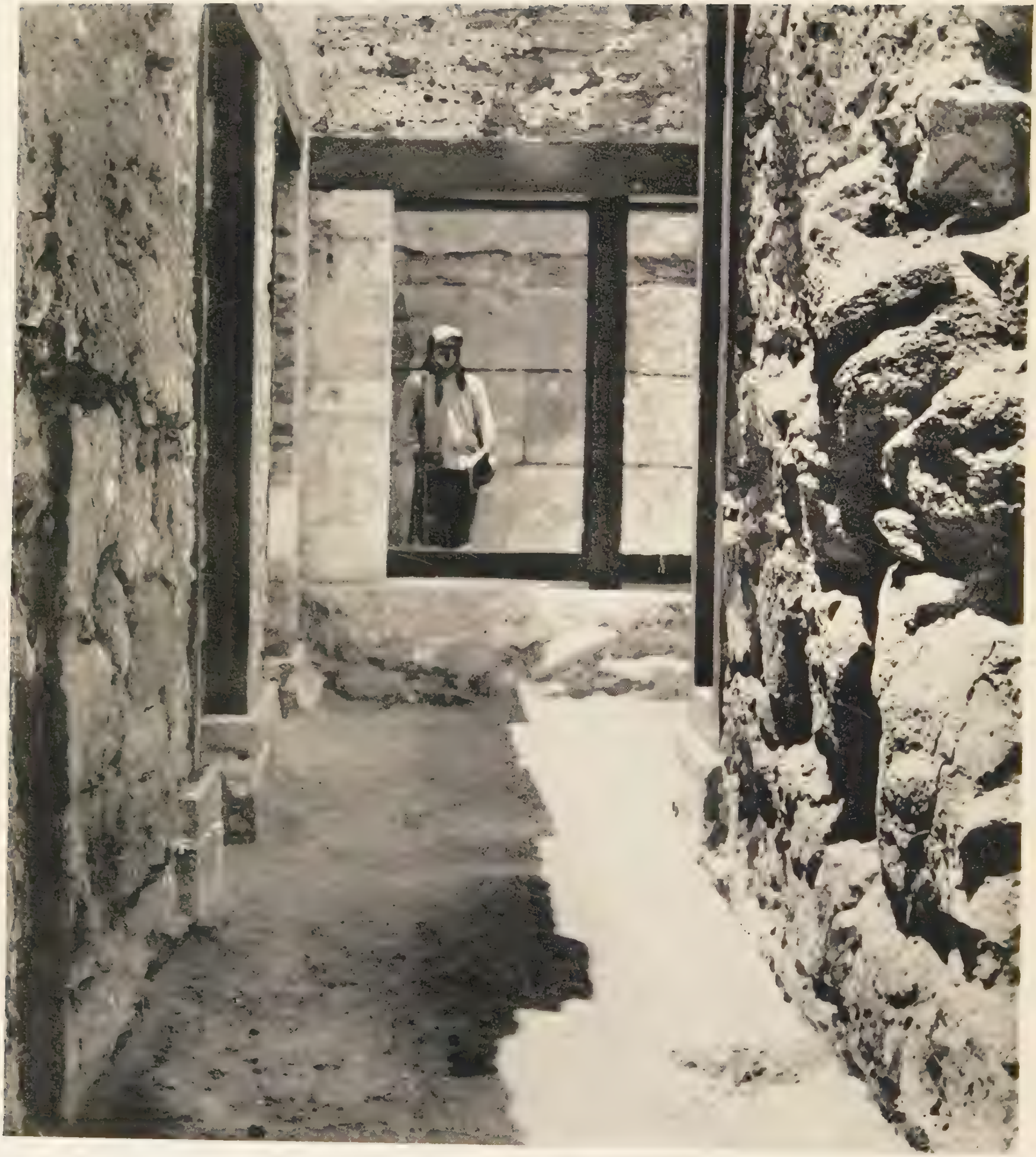

Fig. 265. View looking West along Corridor between Store-room ('Lair') and Service Stairs, the 'Court of the Distaffs' being visible beyond, through Window. To the Left are the Door-jambs of the Store-room and of the Entrance to the 'Toilette Room'. Two Jambs are in Each Case superposed, representing the Earlier and Later Floor Level (M. M. III *a* and Close of L.M. I *a*).

the great built drain running North and South which was later made use of for the latrine. The roof slab of this served as a support for a wall belonging, apparently, to the great Restoration of M. M. III *a*, and by which the closet and the adjoining 'Toilette Room' were partitioned off from this inner space.

The level of this 'kalderim' pavement lies 80 centimetres below that of the later threshold of the doorway, which may be taken to belong to the time of the partial restoration and re-decoration of this section of the building towards the close of L. M. I *a*. The area seems to have been a good deal disturbed by later treasure hunters, so that the stratification was here somewhat confused, but it was clear that—unlike the 'Megaron' to the East of this—no stone pavement had been here laid down since the early 'kalderim'. The fine 'mosaiko' system of M. M. II *b* and the gypsum slabbing of the succeeding epoch were alike wanting, and the successive floor levels were here of the clay and plaster kind. This may, perhaps, be taken to indicate that throughout these later phases this room had been set apart for storage rather than for habitation. In the S.W. corner of its upper floor was found a steatite lamp,[1]—an appropriate indication of the artificial lighting here necessary.

Early door-jambs.

In its earlier form, however, as represented by the 'kalderim' paving this space had clearly formed part of a Palace hall, since, beneath the later wall that divided this small apartment from the 'Corridor of the Painted Pithos' were found traces of a row of door-jambs that had opened on an earlier passage-way on that site. Owing to the overlying masonry, however, these could not be more completely investigated. This 'kalderim' system, as we shall see, seems to have had an extension Northwards under the 'Service Stairs'.

Clay and plaster floors (M.M. III) of later store-room.

Beneath the later floor of the little 'Store Room',—answering to the entrance level and presumably of L. M. I *a* date—there were traces at a depth of 25 centimetres of an important clay and plaster flooring belonging apparently to the earlier part (*a*) of the Third Middle Minoan Period, and it was from between these two levels that the principal relics here found were brought out. The places where these occurred were chiefly by the S.E. and S.W. corners. It looks as if the central part of the area had been more especially disturbed by treasure hunters.

Relics fallen from treasure chamber above.

The relics found consisted of various precious materials including gold, bronze, ivory, faïence, red jasper, and rock crystal, mostly in a fragmentary condition, while in the superficial stratum were many clay seal-impressions.

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[1] Cf. p. 27, Fig. 14, *b*, above, but with a plainer pedestal.

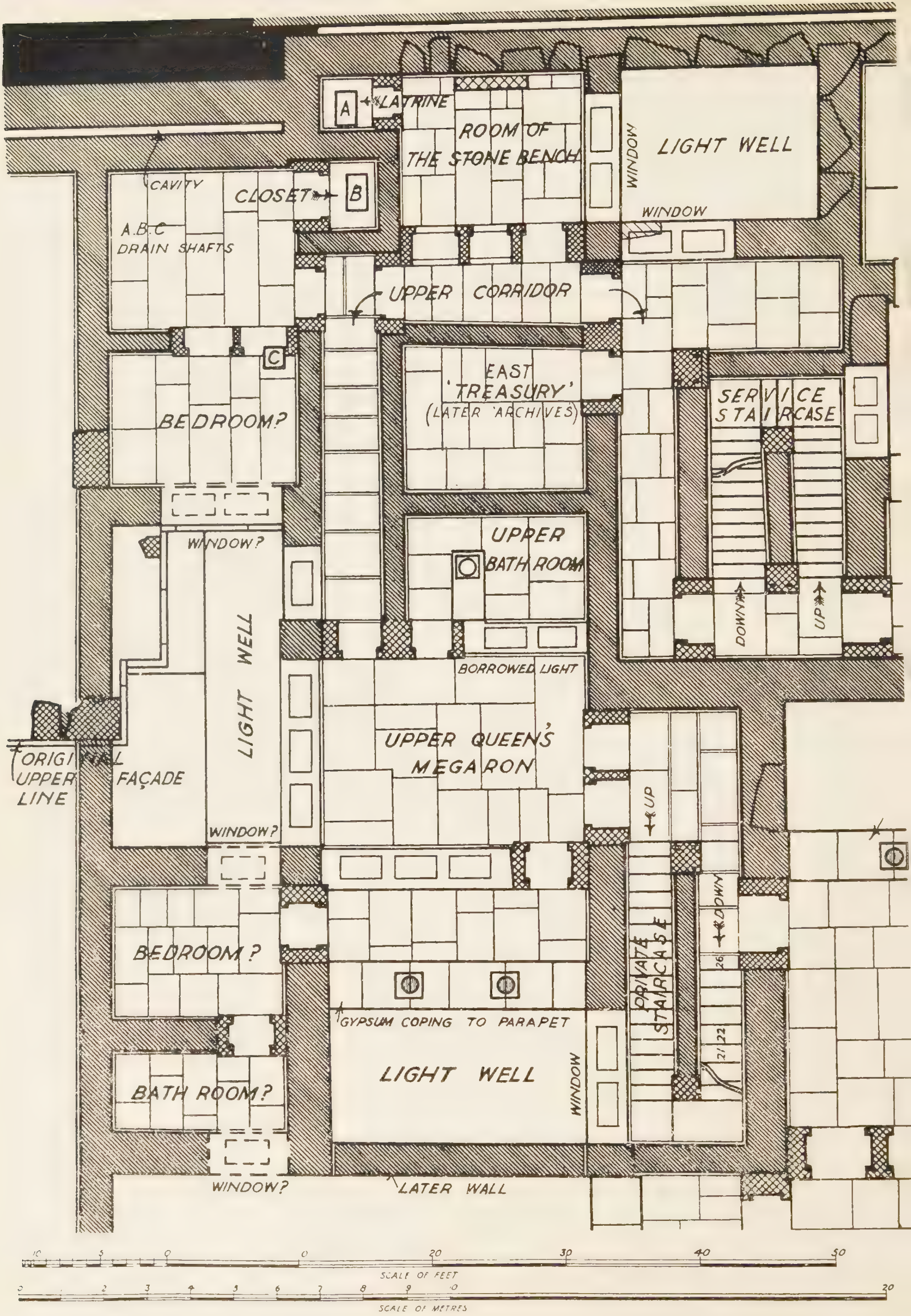
A
LATRINE
ROOM OF THE STONE BENCH
WINDOW
LIGHT WELL
WINDOW
CAVITY
CLOSET
B
A.B.C DRAIN SHAFTS
UPPER CORRIDOR
C
BEDROOM?
EAST 'TREASURY' (LATER ARCHIVES)
SERVICE STAIRCASE
WINDOW?
UPPER BATH ROOM
LIGHT WELL
DOWN
UP
BORROWED LIGHT
ORIGINAL UPPER LINE
FAÇADE
UPPER QUEEN'S MEGARON
UP
WINDOW?
BEDROOM?
PRIVATE STAIRCASE
DOWN
26
21 22
GYPSUM COPING TO PARAPET
LIGHT WELL
WINDOW
BATH ROOM?
WINDOW?
LATER WALL
10 5 0 10 20 30 40 50
SCALE OF FEET
0 1 2 3 4 5 6 7 8 9 10 20
SCALE OF METRES

Fig. 266. Plan of First Floor of Domestic Quarter. Christian C. T. Doll.

Some remains of carbonized woodwork seem to have belonged to the chests in which the valuables were originally stored. Near the doorway there had come out a heart-shaped pendant in solid gold (Fig. 273), and the discovery had at first encouraged the idea that there might be more relics in precious metal. This, however, was not borne out, though there occurred considerable masses of crumpled gold foil, and the gold fish described below was unquestionably derived from the same upper Treasury.

Extension of deposit beneath stairs.

Crucial evidence, produced by the discovery of another similar deposit in a chest beneath the stairs on the other side of the passage-way by the door, as well as other data, supplied by finds made on the upper floor, made it clear that all these relics had really been precipitated—owing to some collapse of its floor due to seismic causes—from the small chamber immediately above the Store Room here referred to and exactly corresponding with it in its dimensions and secluded character. That the lower room had served for storage, possibly of objects of a more perishable nature, may well be inferred. But the original source of all the precious and artistic objects of which remains were found in the Store Room and Staircase Closet of the ground floor had originally belonged to what must be recognized as the Treasury of a small Shrine on the floor above. It is here referred to as the 'East Treasury' (see Plan, Fig. 266) which afterwards served for the later Archives.

The inter-connexion of the remains in the two lower deposits, and others more sporadically forthcoming on the upper level, is itself sufficiently established. A few examples may suffice. Parts of the same crystal bowl occurred both in the lower Store Room and Closet, together with fragments belonging to the same ivory objects. On the other hand the fellow to a small double-axe blade of bronze with gold plating was found on the upper level.

The 'Ivory Deposit'.

Apart from the elements shared with the objects found in the 'Store Room', the deposit of relics brought to light in the neighbouring Closet had its individual character, mainly consisting as it did of ivory objects, and, from the carbonized remains with which they were associated, we may assume that most of these had been contained in a separate chest.

Parallel stratification under stairs.

The space from which this 'Ivory Deposit', as it may be distinctively called, was brought out, had originally formed a small Stair-Closet, 1·15 metres wide with a low breastwork in front, beneath the second flight of the (certainly wooden) 'Service Stairs'. (See Fig. 249, p. 375.) The stratification within was found to correspond with that of the 'Store Room' on the other side of the passage. Here, too, at the same level were traces of 'kalderim' blocks, while the true level of the original plaster floor of the Closet itself answered to the M. M. III*a* level of the 'Store Room'. The fallen remains—which must have found their way here through the ruin of the flight above—probably owing to the great Earthquake of the closing phase of M. M. III *b*—lay, as in the other case, immediately above this level. A certain chronological clue was indeed supplied by the discovery, immediately above the ivories, of

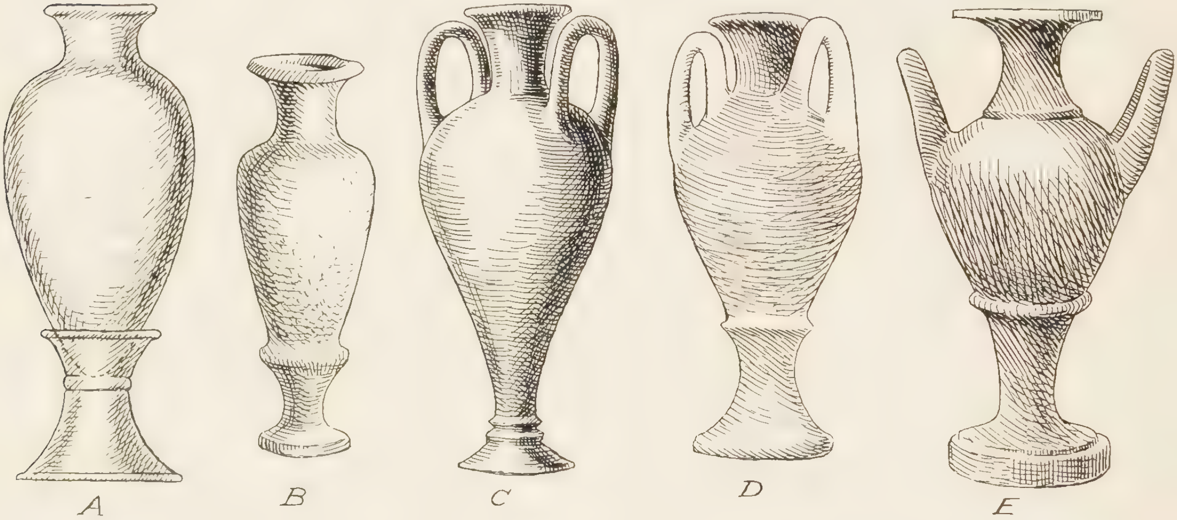

Fig. 267. Egyptian Pedigree of M. M. III Pedestalled Vases: a, Egyptian Alabaster Vase (XIIth Dynasty) with Separate Stand; b, Egyptian Clay Type (Buhen); c, M. M. III *a* Vase with Red Glaze; d, M. M. III *b*, Phaestos; e, M. M. III *b*, above 'Ivory Deposit'.

M. M. III*b* pedestalled vases at top—their Egyptian pedigrees.

the remains of three clay vases—two of them practically complete—of a high-pedestalled type with two raised handles very characteristic of the M. M. III phase (Fig. 267, e).

As already pointed out,[1] this type is of great morphological interest, since it is clearly a reflection of an Egyptian form of vessel derived from the coalescence of a well-known painted form of Twelfth Dynasty *alabastron* with its, originally separate, base,[2] the two handles being added by the Minoan potter in the same way as he added handles to other borrowed types of Egyptian vases of stone or metal.[3] A somewhat earlier example (c) of the Cretan class, distinguished by its brilliant vermilion glaze, from a M. M. III *a* deposit in a basement N.W. of the Palace has been illustrated above. Those from Phaestos, (D) the rim and handles of which have a milky white wash, and which show a waved red band round the neck, must be regarded as belonging to a maturer phase of the same Period. On the other hand, the vases represented by Fig. 267, E, found above the 'Ivory Deposit', which showed no remaining traces of painted decoration, and were equipped with less elegantly set handles, must certainly be referred to a somewhat degenerate stage of the fabric. They belong in fact to the closing M. M. III *b* stage. That they were found—two of them fairly complete—immediately above the ivories may point to their having been placed there shortly after the precipitation of the latter. There was no intervening deposit.

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[1] *P. of M.*, i, pp. 415–17, and cf. Fig. 301.

[2] See *ibid.*, p. 417, Fig. 302 *a*, *b*. The Egyptian specimen there illustrated in *b* is from Buhen, Cemetery H, Tomb 3 (D. Randall-MacIver and C. Leonard Woolley, *Buhen*, Pl. 48 s, xliii, and text, p. 138). The cemetery was mainly Eighteenth Dynasty, but the typological relation of this Egyptian specimen to the earlier *alabastra* on stands is clear. The vase was of red clay covered with a pinkish white slip. Its height was 0·26 m.

[3] Attention has already been called, *P. of M.*, i, p. 83, to the fact that the Early Minoan long-spouted ewers were derived from the Early Empire Egyptian, with handles added. A parallel case is supplied by the relation in which the Egyptian long-spouted libation vessel stands to the handled Minoan type

The little closet in which these remains lay had been re-used, like the small chamber above the 'Queen's Bath-room', by squatters of the Reoccupation period, and, in this case as in the other, there occurred, after an interval of deposit 30 centimetres thick, a late floor-level on which were 'stirrup-vases' and two-handled jugs of L. M. III *a* date.

Fragments of Miniature Fresco with 'Ivory Deposit' relating to bull-sports.

Corroborative chronological evidence of great interest was supplied by the occurrence in the 'Ivory Deposit' of two very fine fragments of Miniature Fresco. These, as shown above,[1] relate to bull-grappling scenes in connexion with a pillar shrine presenting Double Axe symbols. It seems, moreover, extremely probable that another larger fragment found somewhat high up above the floor of the 'Queen's Megaron' depicting part of a charging bull, with acrobatic figures above,[2] belonged to the same series, though it had drifted in another direction.

Upper treasury chamber later used for archives.

It seems possible that though, owing to the structural damage caused by the great Earthquake, a large part of the contents of this Upper Treasury had been precipitated into the Store Room below or the adjoining Stair Closet, some portion of it may have been upheld by what remained of

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represented by No. 40 of the Hieroglyphic signary (A. E., *Scripta Minoa*, i, p. 197). So, too, the early Egyptian carinated bowls of diorite and other materials appear with handles in their Minoan clay derivatives. The Minoan carinated bowl of Spartan basalt, p. 270, Fig. 182 above, had been given metal handles. A parallel Egyptian type, but nearer related to the Minoan 'pithoid amphoras' (*P. of M.*, ii, Pt. II, p. 424 seqq.) is supplied by a marble vase in the Cairo Museum from the Tomb of Queen Hatshepsut (*c.* 1480) (H. R. Hall, *The Civilization of Greece in the Bronze Age*, p. 200, Fig. 261). The upper tier of handles is here alone taken over, but, like these, the ringed base is due to the reaction of a Cretan model resembling the 'amphora' seen in the Senmut tomb (*P. of M.*, ii, Pt. II, p. 426, Fig. 247).

[1] See above, pp. 207, 208, Figs. 141, 142.

[2] See above, p. 209, Fig. 143.

its original floor. It is certain indeed that, at least as a repository of documents, this small chamber continued to fulfil its original function. A large number of clay sealings, mostly fragmentary, and some of them distinctly late in type, were found below at a higher level, their presence being explained by the collapse of the floor as restored after the seismic catastrophe. As forming stratigraphically a separate entity from the bulk of the present deposit an account of this scattered but very important hoard of clay seal-impressions is reserved for a later Section.[1]

Sealings and tablets of Linear Class B.

Some of these sealings, in that case accompanied by fragments of Inscribed Clay tablets of the Linear Class B, occurred above the balustrade of the neighbouring ‘Queen's Bath-room’. It may be assumed indeed that the deposit of late seal-impressions found in the small bordering space immediately West of the ‘Service Stairs’ and named, after a recurring type there found, the ‘Area of the Demon Seals’,[2] also belonged to this later deposit. This is confirmed by the parallel discovery, above the floor-level of the passage-way at the foot of the stairs, of broken seal-impressions of the same class, together with some thicker clay nodules that had evidently been attached to the strings of packages presenting *graffito* inscriptions of Class B. An account of these later relics must be reserved to the concluding part of this Work, where it is proposed to deal with the closing Palace phase belonging to the Second Late Minoan Period.[3] From its occurrence near the Northern border of the adjoining ‘Room of the Stone Bench’, it is also probable that the largest of all the advanced linear tablets—of which a facsimile will be there found—was derived from the same archives as preserved in the Treasury Chamber in its later phase. This inscription consists of twenty-four lines and contains lists of numerous persons, marked by the male ideograph, attached in each case to a sign-group apparently representing the name.

Relics from ‘Treasury’ in ‘R. of Stone Bench’.

The possibility that part of the original relics had remained *in situ* may allow us to suppose that the disturbance incident on the final catastrophe at the end of L.M. II was instrumental in distributing some stray specimens above the floor of the adjoining ‘Room of the Stone Bench’ including one of the gold-plated bronze axes[4] and the gold fish.[5]

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[1] See Vol. iv.

[2] It was here that were found most of the fragments of the ‘Shield Fresco’ belonging to the Upper Loggia of the ‘Grand Staircase’ (see above, pp. 301, 302).

[3] See, too, my forthcoming *Scripta Minoa*, ii and iii.

[4] Found just beyond the remains of the West wall of the ‘Treasury’.

[5] Near its South-West Corner.

Deposit in Drain-shaft.

Deposit in drain-shaft.

Clearly marked as belonging to the same stratigraphic horizon as the relics found beneath the later floor of the 'Store Room' and in the Staircase Closet was a third main deposit, brought out from the lower part of a stone shaft about two and a half metres South of the Treasure Chamber. (See Plans, Figs. 249, 266.) This chimney-like structure—of good masonry, 49 centimetres square internally—was brought to light beneath the threshold of a doorway, a fact which itself indicated that there had been some structural change at this point. This was probably due to the restoration about the end of L. M. I *a* and belonging to an epoch when the shaft itself had ceased to fulfil its functions. The shaft had been closed by a slab above, apparently at the time when the doorway was made. It seems to have served as a kind of man-hole at the junction of two of the great stone-built drains below, and may have been originally used either for inspection or ventilation.[1]

It had been deliberately packed with earth to a depth of three metres, but, beneath this filling, was brought out a deposit containing many relics that had undoubtedly found their way here from the 'Treasure Chamber' at the time of the great Catastrophe. A series of objects were in fact brought to light here, including faïence and crystal inlays and parts of ivory bracelets, identical with those found beneath the later floor of the 'Store Room' near by.

Bone 'Fish' and Segments cut from Bracelets, with Alphabetiform Signs.

Bone fish with alphabetiform signs.

The deposit itself continued into the neighbouring part of the Eastern drain below, from which some highly interesting objects in brown steatite were brought out forming part of the locks of a large composite figure of a Sphinx, which will be described below. Apart from this, the principal feature of this group of relics was the occurrence of numerous bone 'fish'[2]—of the same *vesica piscis* shape as a well-known class of counters for card games—ribbed above but incised on the plain face below with signs of a curiously alphabetiform type, accompanied by scores consisting of short horizontal strokes that had clearly served for numeration. (See Figs. 268–70.)

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[1] See *P. of M.* i, p. 228 and Fig. 171, *b*.

[2] For this discovery see, too, A. E., *Knossos, Report*, 1901, pp. 118–20. The 'fish' were of a mean height of about 35 millimetres and breadth of 17 mm.

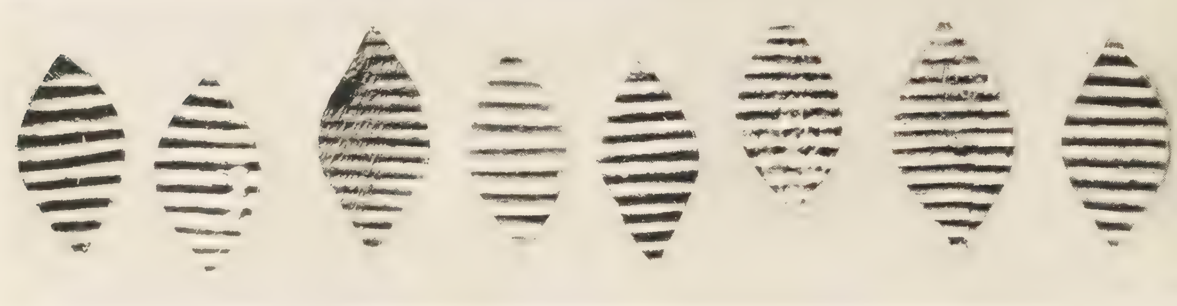

Fig. 268. Bone 'Fish' from Drain-shaft Deposit (Upper Surface).

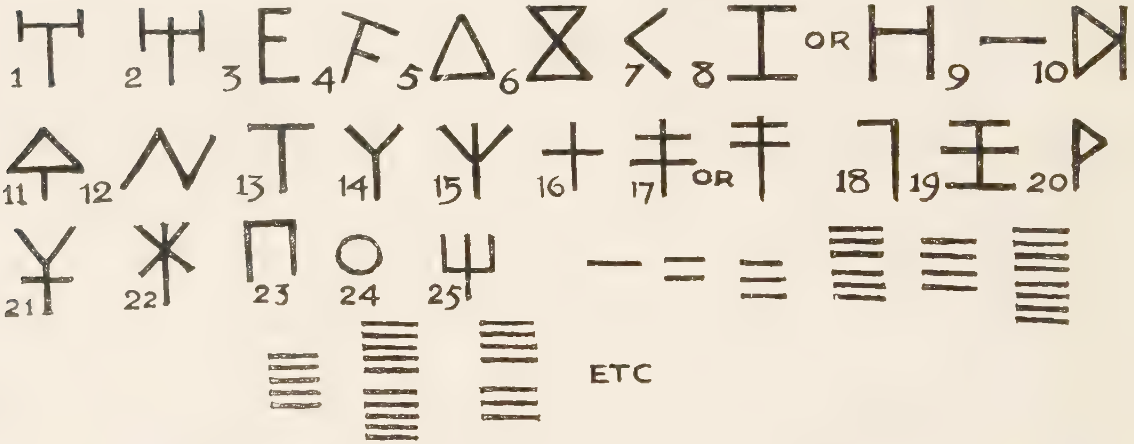

Fig. 269. Alphabetiform Signs and Numbers on Bone 'Fish'.

Parallels with Greek letters.

It was indeed astonishing to note that out of twenty-five varieties, eleven are practically identical both in shape and position with later Greek alphabetic forms, while four more are the same though in a different position, making fifteen in all. Thus we have: Δ, Λ, H, N, Ξ, Π, Ρ, Y, +, O, and a form approaching the digamma, as well as Ǝ, ⌉, −, ⋖. Yet the Minoan date of these bone pieces is as well ascertained as anything found within the walls of the Palace. They lay 6·60 metres—or over 21 feet—beneath the surface of the earth, in a closed deposit, a *terminus ad quem* for the date of which can be definitely assigned not later, at any rate, than the end of the Sixteenth Century B.C.

At the same time it should always be borne in mind that alphabetiform signs in most cases represent simple geometrical forms, that can be arrived

Simple geometrical

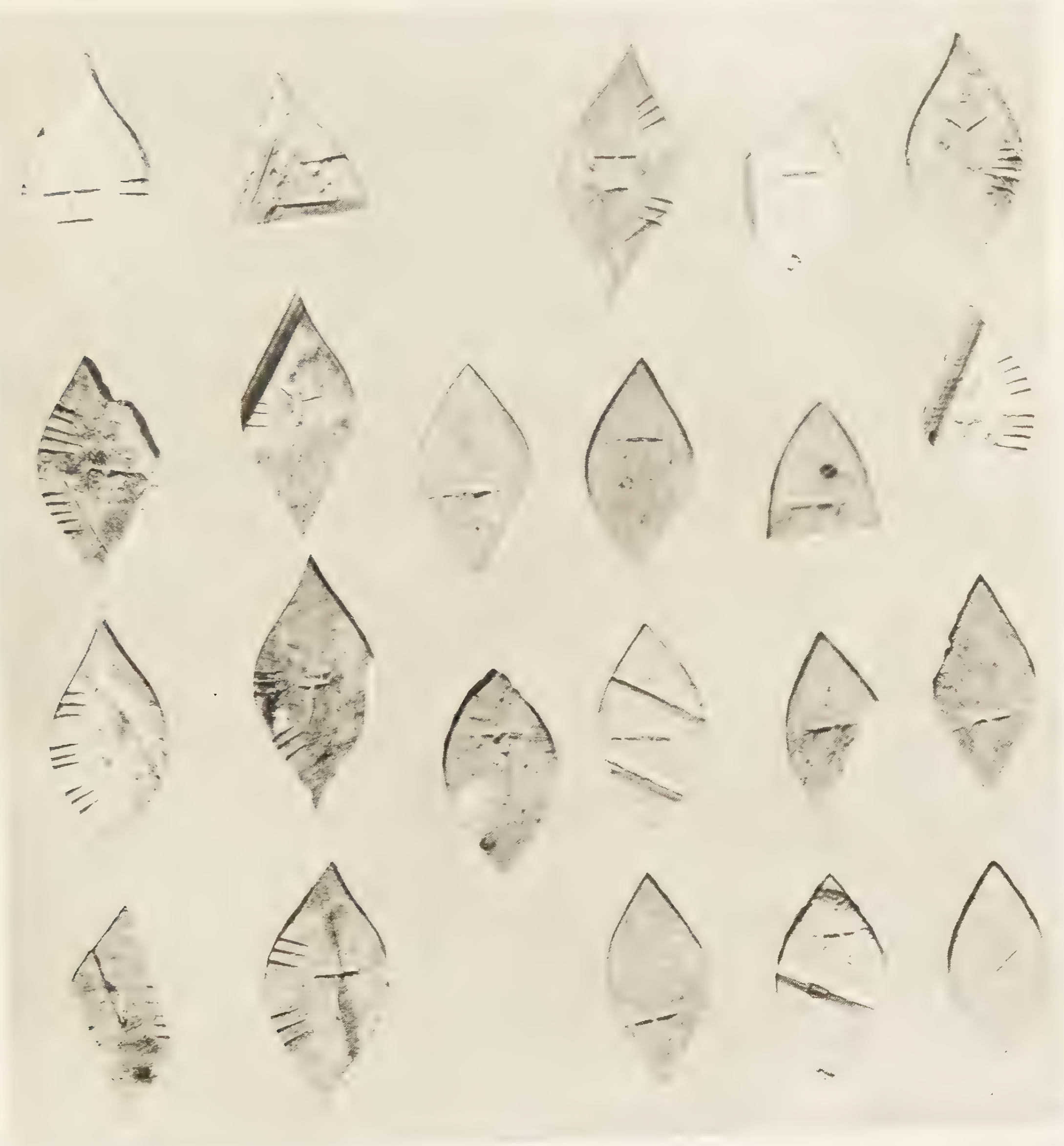

Fig. 270. Bone 'Fish' from Drain-shaft Deposit (Under Surface).

at by more than one route, and that marks, for instance, like A and E already appear on the bone carvings of the Reindeer Period. A more contemporary field of comparison for the signs on the 'fish' is supplied by the

characters of such signs.

advanced linear scripts of Crete, though not more than eight out of the twenty-five forms show any real correspondence. A group of earlier linear signs that appear in connexion with the hieroglyphic script affords a somewhat greater proportional series of resemblances, including No. 10 of the Table (Fig. 269), which presents a somewhat distinctive 'single-axe' type. Similar marks occur on faïence inlays,[1] but much more sparsely, in some cases—like those found in the 'Room of the Throne' at Knossos—accompanied, as here, by marks of numeration.[2]

Inlayers' signary.

The natural inference is that we have here elements of a signary belonging to a Minoan inlayers' guild. The *vesica piscis* form representing a segment of a circle is indeed of frequent occurrence among the corresponding inlays in vitreous paste, and this form of inlay, in this material, occurred in the present deposit.

Accompanied by varying numbers.

What, however, is extremely difficult to understand is why in the case of not more than three dozen whole or fragmentary specimens of these fish-shaped objects no less than twenty-five different marks should appear, coupled with a great variety of numbers on different pieces? The + sign for instance is followed by II, III, III II, III III, and IIII IIII, the highest being IIIII IIII, as if the numbers stopped before the decimal.

It seems probable that in each case the sign was followed by numbers up to nine, and, as there were twenty-five different signs, and probably more, the total number of variations must have amounted to at least 225.[3]

Segments of bracelets with similar marks and numbers.

Perhaps the most puzzling feature is the fact that, side by side with bone 'fish', there occurred remains of a series of segments—seemingly cut out of bracelets of bone or ivory—presenting similar signs and numbers (Fig. 271). A whole specimen of such, uninscribed, was found in the 'Store Room' deposit, and the original ornamental use of the objects as rings was in this case clear from the knobs along their exterior surface.[4] These in any case were not inlays. Neither were they the marks of a bracelet maker since, as is clearly shown from one of the group, the sign that there appears was partly incised on the cut surface of the segment.

What then was the meaning of this elaborate use of signs and numbers?

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[1] E. g. L. Pernier, *Palazzo di Phaestos* (*Mon. Ant.*, xii), pp. 95, 96, Fig. 30.

[2] A. E., *Report, Knossos*, 1900 (*B.S.A.*, vi), pp. 41, 42. In this case the signs were followed by groups of dots. On the faïence inlays from Tell-el-Jehudijeh, where signs much resembling the Knossian occur (cf. *loc. cit.*), there were no marks of numeration. Such, however, sometimes occur on Egyptian inlays.

[3] There is no evidence as to whether any were duplicated.

[4] Remains of gold foil adhered to the outer surface of some of the segments.

Were both classes of objects used for game?

Is it possible that we have to do with two sets of pieces belonging to some game? The fish, like playing cards or dominoes, have a perfectly uniform appearance when laid on their faces, and the segments would be equally indistinguishable from one another if laid in a row on a rounded surface. In default of further evidence the puzzle can hardly be explained, but the suggestion that we have here the pieces of a gambling game may be thought to hold the field.

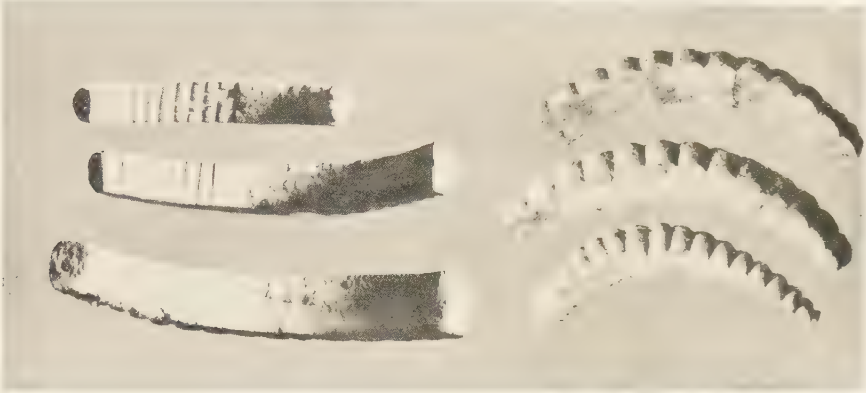

Fig. 271. Segments of Bone Bracelets with Incised Signs and Scores.

Faïence plaques as from 'Temple Repositories'.

The faïence plaques for inlaying, mostly in a more or less fragmentary condition, many specimens of which came out among these Treasury relics, were of various shapes. The prevailing form was oblong with brown horizontal stripes on a greenish ground. Some were in the form of rosettes, others resembled oval shields moulded in relief, and others again were of A shape, in this case showing signs and numbers on their under-sides. Crystal plaques also occurred, reminiscent of those of the 'Gaming Board'. Both these and the faïence inlays, with their green or brownish bands, closely approached those from the *ex hypothesi* contemporary 'Temple Repositories' of the West Palace Wing.[1] They also presented close affinities with similar relics from the Fourth Shaft-Grave at Mycenae.

Parts of casket and chest.

Amongst other fragments were parts of an ivory casket, and the carbonized remains of what may have been a wooden chest, encrusted, doubtless, with some of the inlays.

Rock-crystal bowl and cover.

A beautiful example of Minoan lapidary's work was supplied by the remains—partly found beneath the 'Store room' floor, partly in the neighbouring deposit of ivories—of a rock-crystal bowl, the original diameter of which was 9·5 centimetres, its height being 4·4 centimetres. A restored outline sketch of this is shown in Fig. 272 and, with it, the crystal cover of a 'pyxis'. That the 'Treasury Room' had contained some of the raw materials for lapidaries working in this Palace region is made probable by the occurrence in rubble masonry of the Northern supporting wall as

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[1] *P. of M.*, i, p. 481.

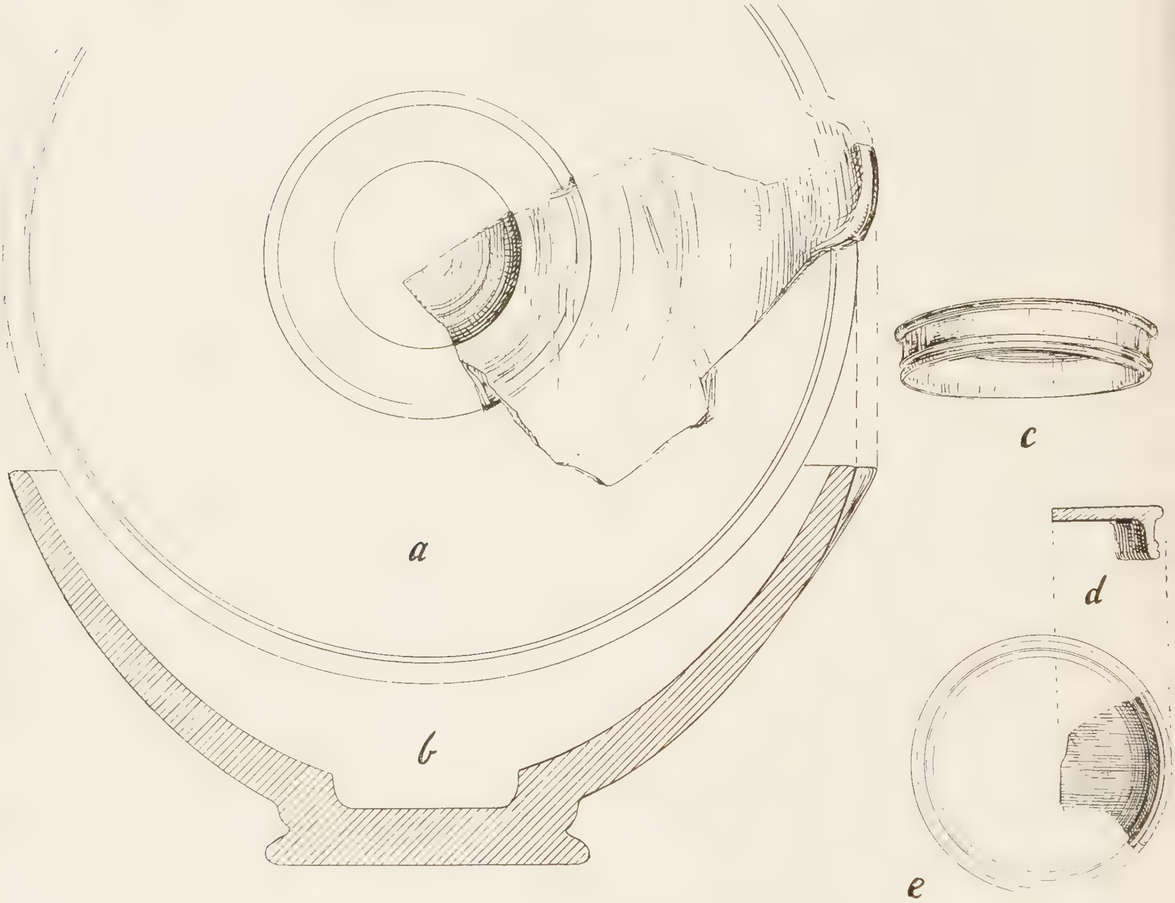

FIG. 272. *a*, *b*, CRYSTAL BOWL (ORIGINAL DIAM. 9·5 CM.); *c*, *d*, *e*, CRYSTAL COVER OF 'PYXIS'.

restored after the Catastrophe of blocks of Spartan basalt with saw-marks, resembling those of the heaps of this material found in the little Store Room already described.[1]

Pendant in form of heart: similar amulets.

The heart-shaped pendant of solid gold, already mentioned, is illustrated in Fig. 273. A similar pendant of cornelian was found in the area of the drain-head serving the Great Eastern Hall of the Palace, and another, of amethyst, was obtained by me from the site of Knossos in 1894.[2] This presents an intaglio of a flying eagle executed in a conventional style very characteristic of the closing Middle Minoan phase.[1] Beneath this were linear marks, which, however, cannot be identified with signs of either of the linear scripts. A heart-shaped pendant of rock crystal closely resembling the above occurred at Gournià,[2] and one described as of 'magnetite' was derived from a tomb at Avgò,[3] also in East Crete. These jewels, in which we may reasonably recognize amulets, do not show the side projections—interpreted as truncated arteries—of the Egyptian heart emblem and hieroglyph. The Soul of the deceased was weighed in this form by Horus against the feather of Truth (Ma'at), but we do not know the exact significance that the Minoans may have attached to their form of the amulet.

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[1] See above, p. 269, and Fig. 181.

[2] A. E., *Cretan Pictographs*, p. 12, Fig. 8 (*J. H. S.*, xiv, p. 281).

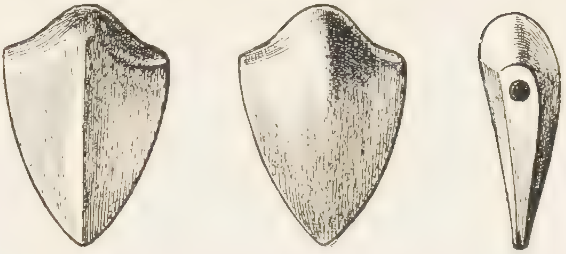
Fig. 273. Heart-shaped Pendant of Gold ($\frac{2}{1}$).

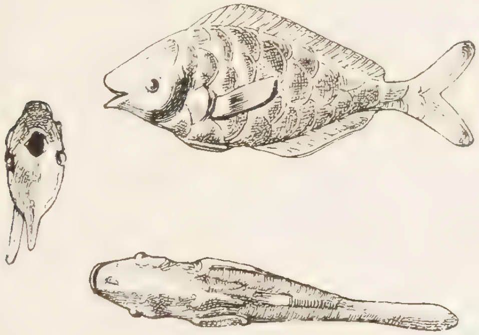
Fig. 274. Gold Fish (*Scarus Cretensis*) ($\frac{2}{1}$).

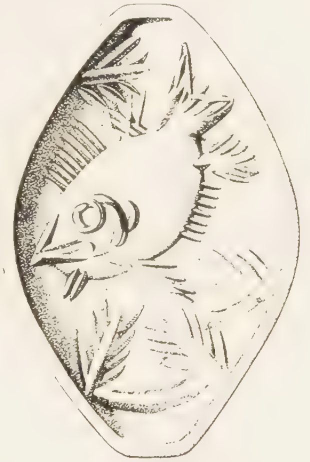
Fig. 275. Cornelian. Amygdaloid showing *Skaros* Fish.

Gold fish: *Scarus Cretensis.*

A striking contrast to this solid ornament is presented by the small but very realistic figure of a fish shown in Fig. 274, which consists of two thin plates of gold fastened together by means of a slight overlap of the rims and filled internally with some kind of plaster. The gold plates had been originally modelled on a core or matrix, no doubt of steatite, the exquisite details being afterwards added by means of a graver. The whole is rendered with great naturalistic fidelity, such features as the fins being very finely engraved. It evidently represents the most esteemed of Cretan fishes, the *Scarus Cretensis*, a spirited illustration of which on a contemporary gem is here reproduced in Fig. 275.[1]

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[1] Compare, for example, a series of flying birds on sealings from Hagia Triada belonging to the closing phase of M. M. III. Many of the Zakro monsters show the same type of wings. Other examples of similar heart-shaped pendants are known in metal-work. For degeneration of these see E. J. Forsdyke, *B. S. A.*, xxviii, p. 288.

[2] Boyd Hawes, *Gournia*, pp. 55, Fig. 35, 3*a*, 3*b* (B. E. Williams).

[3] H. R. Hastings, *Am. Journ. Arch.*, N. S., ix, 1905, p. 284, and Pl. X, Fig. 23.

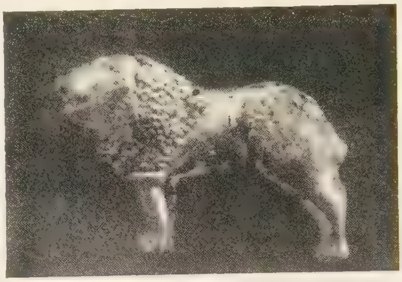

Fig. 275 a. Gold Lion.

Gold lion jewel.

An example of a technique analogous to the gold fish on a more microscopic scale is supplied by a small figure of a lion found by the stairs of the 'Long Corridor', and is here given for comparison on an enlarged scale in Fig. 275 a.[2] The original is only 15 millimetres in length. It is beautifully moulded, its two plates being joined together in a similar manner, but in this case the addition of granules infuses into it an element of a purely decorative nature.

In a less refined form this granulation appears on a gold pendant in the form of a duck formed in a similar manner by means of two thin plates joined above and below found about a metre below the floor of the Upper East-West Corridor and belonging like other associated relics to the closing epoch of the Palace.[3] That this minute form of granulation was already known in Crete at the beginning of the Middle Minoan Age—the date, be it observed, of an early wave of direct influence from the East[4]—is shown by the occurrence in the tholos tomb B at Kumasa of a gold pendant jewel in the form of a toad—only 10 millimetres in length—with similar microscopic globules on its back.[5] But the lion jewel goes far beyond this. In its microscopic execution it anticipates, on the same lines and with unsurpassed delicacy, the finest Etruscan goldsmiths' work of a thousand years later, its naturalistic modelling, however, showing a greater sympathy with the Greek.

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[1] Repeated from *P. of M.*, i. p. 677, Fig. 498. (From near Lappa:—A. E.)

[2] A. E., *Report, Knossos,* 1901, *B. S. A.*, vii, p. 50. An illustration of this was supplied by me to Dr. Marc Rosenberg for the section 'Granulation' of his important work *Die Geschichte der Goldschmiedekunst auf technischer Grundlage* (see p. 29, Figs. 43, 44). Compare, too, G. Karo, Art. *Goldschmiedekunst* in Max Ebert's *Reallexikon der Vorgeschichte*, p. 389 and Pl. 166, *b.*

[3] A. E., *Report, Knossos, B. S. A.*, viii, pp. 38, 39 and Fig. 18. Cf. Rosenberg, *op. cit.*, p. 29, Figs. 41, 42.

[4] Granulated decoration also appears on Egyptian jewellery of the XIIth Dyn. (e. g. in the Treasure of Dahshur), but the method does not seem to be of Egyptian origin. Large granulation occurs on a dagger-blade of Ur.

[5] Xanthudides, *Vaulted Tombs of Messarà* (transl. Droop), p. 29 and Pl. IV, 386.

§ 86. FURTHER RELICS DERIVED FROM EAST TREASURY: SPHINXES, MINOAN AND HITTITE, AND LEAPING YOUTHS OF IVORY DEPOSIT.

Gold-plated bronze attachments—perhaps from Lion's mane; Miniature Double Axes—bronze, gold-plated—from small shrine; Plumed crest and part of wing of Ivory Sphinx; Comparison with naturalistic ivory wing of small bird; The Minoan Sphinx; Minoan Oedipus at grips with it on Thisbê bead-seal; Name of Sphinx Hellenic, Art form Minoan; Wingless Sphinx of M. M. II Signet; Hathoric curls—of Hittite derivation distinct from Egyptian type; Steatite locks of Sphinx's head from drain-shaft deposit; Oriental comparisons—Hathoric elements; H. Triada Sphinx of Hittite type—supplies key to restoration of Knossian head; Twisted locks; H. Triada figure compared with Chaldaean inkstands; Minoan ink-written inscriptions; Immediate source of H. Triada Sphinx Hittite; An imported object; Parallel example recently found at Tylissos; Minoan female figurine of steatite found with Sphinx at Tylissos—peaked cap a novel feature; 'The Deposit of Ivories'; Figures of acrobatic youths; The Leaping Youth—marvellous élan; *Chryselephantine Art; Curled flying locks of bronze, gold-plated; Part of larger arm; Figures engaged in Sports of Bull-ring—these under divine patronage; Faïence head of bull; A miniature Minoan* Corrida—*perhaps exhibited in Sanctuary.*

Gold-plated bronze attachments: perhaps from lion's mane.

OF enigmatic character were a series of bronze objects showing remains of gold plating and provided with projecting pins for insertion into wood, of which abundant carbonized remains were attaching to them.[1] In one case (Fig. 276, *a*, *b*) the bronze plate was coiled below and rose above in an undulating triple crest with terminal coils. Joined together in a row these objects might suggest some conventional representation of the crest of a lion's mane.

The other plates (Fig. 276, *c*, *d*) show a simple coil, and as, from their association with the others and identical technique, it seems fairly certain that they belonged together, we may here perhaps recognize an attempt to render the curling side-locks of a lion's mane. Locks of this character, though with a less accentuated curve, are in fact visible in the fragment of stucco relief of a lion's neck and mane found in the vault beneath the South-East Staircase.[2] It is probable, that, as in that case, the composite figure of a lion partly carved in wood to which these plated bronze attachments seem to belong, stood in a direct relation to the cult of the Minoan Goddess, who at Knossos appears on signet impressions of her Central Shrine between lion guardians, as a pre-Hellenic Rhea.[1]

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[1] See, too, A. E., *Knossos, Report*, 1902, p. 71, and Figs. 35, 36.

[2] *P. of M.*, ii, Pt. I, p. 333, Fig. 188 *a*.

Miniature Double Axes:

Attention has been already called to the painted stucco fragments in the 'Miniature' style—two of them found with the ivory relics, in this deposit— depicting part of the entablature of a small shrine of the Double Axes and the bull-sports held in connexion with it. The worship itself is further recorded in a more concrete manner by the occurrence, each in a different part of the present deposit, of two bronze Double Axes of miniature dimensions, with remains of gold plating still attached to their surface (Fig. 277). Unlike many votive axes of this kind, they are of solid material, in this resembling the steatite examples found in the later Palace shrine.[2] We must infer that these too had had their shafts socketed in a pair of 'Sacral Horns', and that an actual shrine of the Goddess had stood within easy range of the Upper Treasury Chamber.

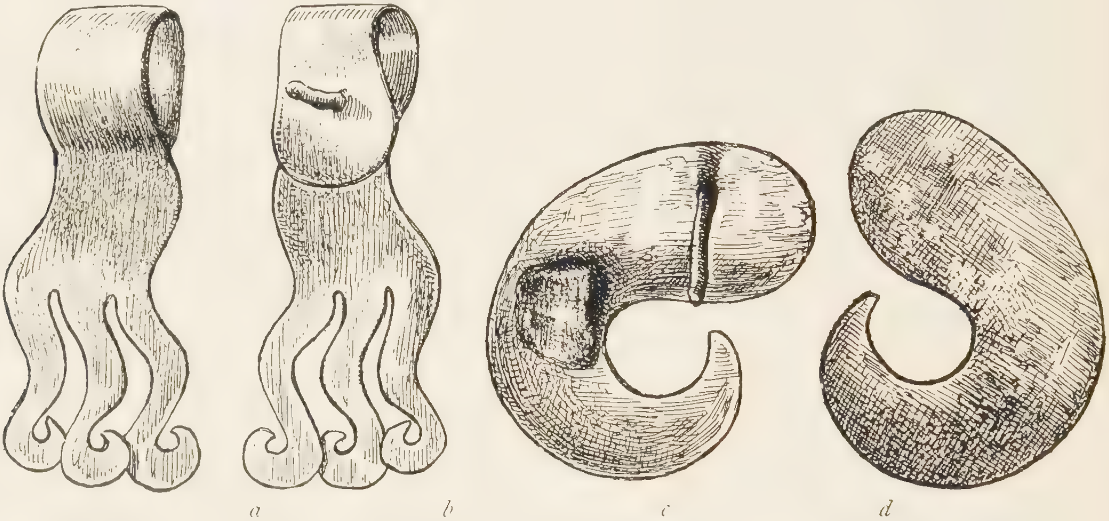

FIG. 276. BRONZE ATTACHMENTS, PERHAPS FROM FIGURE OF LION. *c* SHOWS ATTACHED FRAGMENT OF CARBONIZED WOOD (*c.* $\frac{3}{4}$).

bronze, gold-plated, from small shrine.

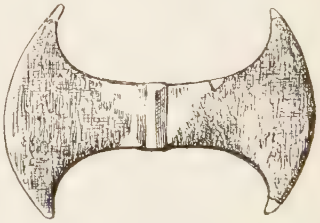

FIG. 277. MINIATURE DOUBLE AXE OF BRONZE WITH REMAINS OF GOLD PLATING.

Ivory fragments, as well as some curious steatite objects, show that the Goddess here was not without her sacred monsters of a more mythological class.

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[1] See *P. of M.*, ii, Pt. II, pp. 808, 809, and Fig. 528.

[2] *Ibid.*, ii, Pt. I, p. 339, Fig. 191, and cf. p. 338, Fig. 190, Section.

Fragments of Ivory Sphinx.

Plume crest and part of wing of ivory sphinx.

One of the finest artistic works found in the Deposit is a curving ivory plume rising from a knob (Fig. 278) already referred to as almost certainly representing the crest of the tiara that specially characterizes the Minoan Sphinx and was thence taken over by the Priest-kings themselves.[1] But the feathers here are even more exquisitely rendered than those of the peacock's plumes in the painted relief. For this naturalistic work a useful comparison is supplied by the very beautiful wing of a small bird from the same Deposit of Ivories (Fig. 279).

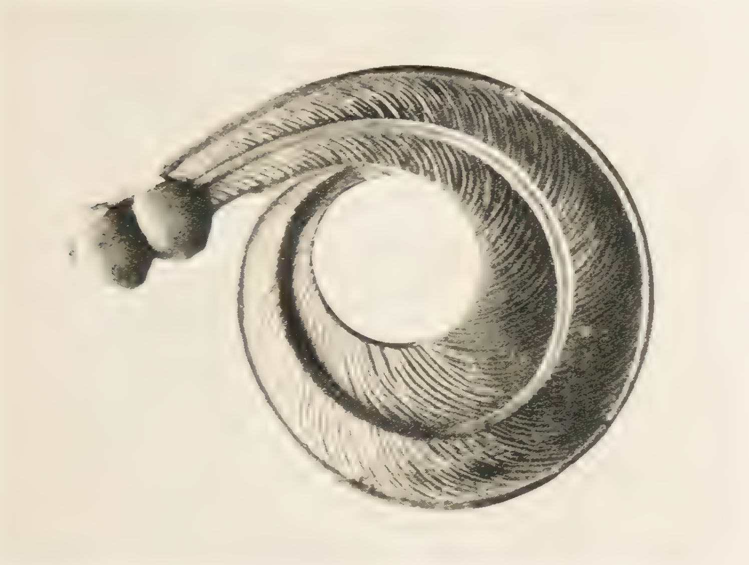

Fig. 278. Plumed Crest of Ivory Sphinx.

The plume-crest here found answers to the scale of an associated ivory fragment (Fig. 280) which we may assume to have belonged to the wing of the same monster. It presents, in fact, along its upper border the spiral coils that characterize the wings of the Sphinx[2] and Griffin in Minoan Art. Another piece with part of a curving band in reliefs may have formed part of the base.

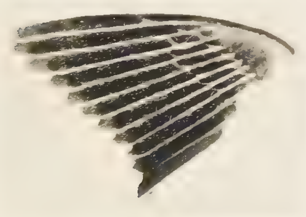

Fig. 279. Ivory Wing of Small Bird.

The Minoan Sphinx.

As will be seen from the restored sketch (Fig. 281), we have here to do with a type of winged Sphinx of which further illustration has been supplied by a painted stucco fragment given above,[1] and which is a fantastic creation, closely parallel to the Minoan Griffin. The spiral side-locks and coils that accompany it are, in fact, equally characteristic of this eagle-headed monster, and in that case seem to have been, in part at least, suggested by markings about the eye and on the side of the head of its prototype, the sacred hawk of Egypt.[2] The affiliation to the Egyptian hawk-headed monster at the same time made wings a part of his birthright.

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[1] *Ibid.*, ii, Pt. II, pp. 777–8.

[2] For the plumed Sphinx see the ivory mirror handle from a tomb at Zafer Papoura (A. E., *Prehistoric Tombs of Knossos*, i, pp. 63, 46, and Fig. 69. See, too, *P. of M.*, ii. Pt. II, p. 778, Fig. 506, *a*). An ivory plaque with a similar relief of a plumed Sphinx was found at Spata (*Bull. de Corr. Hell.*, 1878, Pl. XVII. See, too, *loc. cit.*, Fig. 506 *b*).

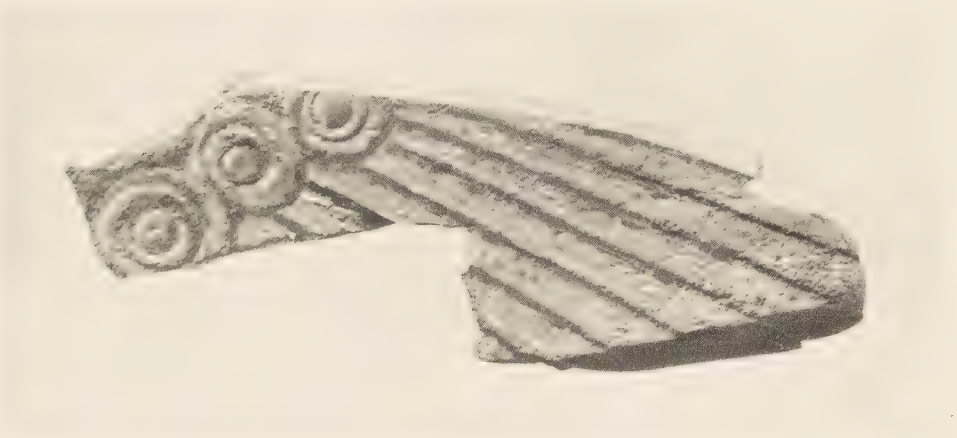

Fig. 280. Part of Wing of Ivory Sphinx.

Minoan Oedipus at grips with it on Thisbê bead-seal.

This female Sphinx, with wings showing the 'notched plumes' and with a crested head, was, in fact, the prototype of the form finally diffused through the Hellenic world. What is of special interest, moreover, in this connexion is that it is seen already at grips with a Minoan Oedipus on a gold bead-seal, conspicuous among the relics from the 'Treasure of Thisbê', the port of the Boeotian Thebes (Fig. 282), and approximately dating from the beginning of the fifteenth century before our era. As may be gathered from the ceramic remains found in the Kadmeia, the foundation of the Minoan Palace on that site, which sealed the Cretan conquest of Boeotia, did not itself date appreciably earlier than this.[3] But is it conceivable that the Sphinx and the Oedipus story—a further episode of which, the slaying of his father Laios in the 'Hollow Way' (σχιστὴ ὁδός), seems to be recorded on an intaglio of the same set—could have been thus suddenly implanted on Boeotian soil?

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[1] See above, p. 41, Fig. 25, *d*, and cf. p. 40.

[2] See *P. of M.*, i, p. 710, Fig. 533. The sacral associations of the side-lock of the infant Horus—itself a survival of old Libyan custom—must, however, also be taken into account. These are duplicated in certain types of the Mother Goddess, Hathor, herself.

[3] The sherds obtained by Professor Keramopoullos in the course of his exploration of the Kadmeia (see especially his *Θηβαϊκά*, Ἀρχ. *Δελτίον*, 1917) consistently represent the mature phase of L. M. I *b*, dating from about 1500. The contents of the tombs repeat the same story.

These scenes clearly refer to some episode in the local folklore long connected with the spot. The monster who in later days haunted the wild rocky range—the 'Sphingion Oros'—that shuts in Thebes on the North, and of which the Sphinx on the jewel[1] already seems to appear as the guardian, was surely old established on the spot. In its artistic Minoan form, indeed, it is clearly an exotic importation—but may it not have been fitted on to some old indigenous shape?

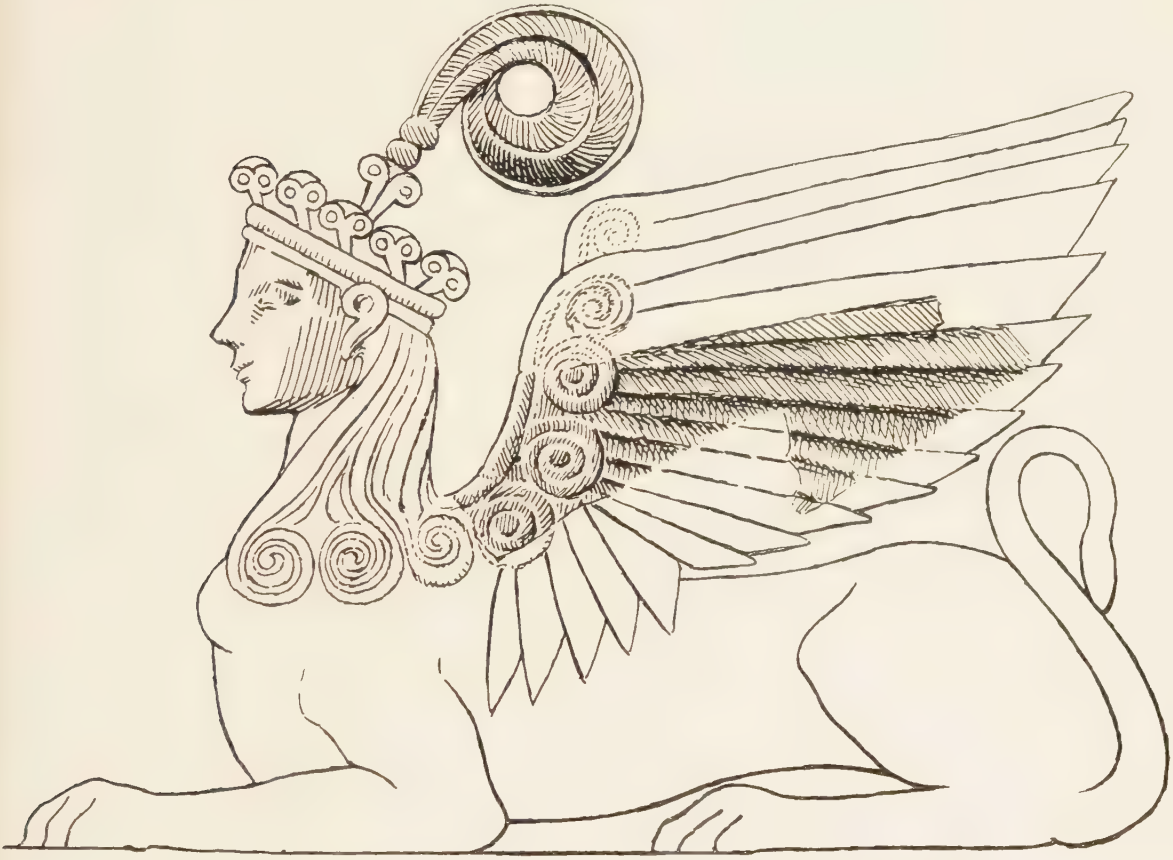

FIG. 281. RESTORED SKETCH OF IVORY SPHINX: DEPOSIT OF IVORIES.

Name of sphinx Hellenic: art form Minoan.

In this connexion, as I have ventured to point out elsewhere,[2] it is a highly suggestive fact that, though an Egypto-Minoan Art form was thus early attached to the monster, the name itself is undoubtedly Greek. 'Sphinx' is, of course, connected with the verb *σφίγγω* 'to squeeze' and may be interpreted as the 'constrictor'—a daughter, it is to be remembered, according to the indigenous tradition, of Echidna the 'adder'. May we not infer that already by the time of the Minoan Conquest of 'Minyan' Thebes—somewhere about 1500 B.C.—a Hellenic population was settled in the neighbourhood, from whom the folklore concerning the local monster of this name was taken over?

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[1] The upper curve of the intaglio shows a border of rocks

[2] See *The Ring of Nestor*, pp. 29, 30.

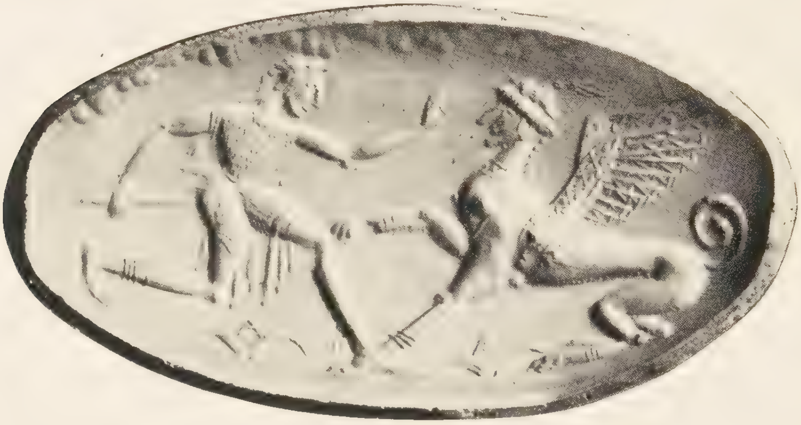

Fig. 282. Oedipus slaying Sphinx in Rocky Glen on Gold Bead-seal from Thisbê ($\frac{3}{1}$).

The youthful prince who is seen attacking the monster on the intaglio may himself very well represent the conquering Minoan element.

Wingless Type of Minoan Sphinx and its Anatolian Relations.

A special circumstance lends interest to the fact that the ivory fragments among the 'Treasury' relics have thus made possible, in Fig. 281, a restoration of a characteristic winged Sphinx of the true Minoan breed. For, as will be shown below, remains from another part of the same deposit belong to a monster of quite different parentage.

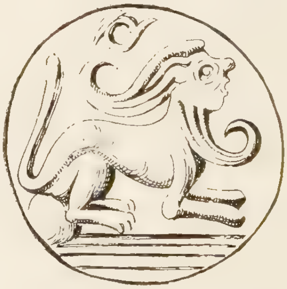

Fig. 283. Wingless Sphinx in Green Jasper Signet Seal: Arkhanes, near Knossos.

Wingless Sphinx on M. M. II signet.

That a wingless form of Sphinx had reacted on Minoan phantasy at a still earlier epoch is clear from some sphragistic evidence. A 'signet' seal of green jasper of M. M. II date (Fig. 283), found near Arkhanes,—a considerable Minoan centre inland of Knossos with traces of a Palace[1]—depicts a seated Sphinx without wings but with a coiled side-lock and streaming tresses curving up behind. Its upright tail might suggest the influence of the desert monster Set. The coiling side-lock of this type is certainly Hathoric, and there can be little doubt that it connects itself with a facing head with curling tresses streaming out on either side that appears between two signs on a fine four-sided cornelian bead-seal from Central Crete[1] (Fig. 284). The 'signet' type of seal to which Fig. 283 belongs points itself to Hittite influences, and the head on Fig. 284 is a more or less fantastic development of the Hathoric head—adopted by a form of Ishtar—that appears on Syrian Monuments.[2] It would seem, then, that the type of the wingless Sphinx had reached Crete betimes from the lands to the East of it, such Egyptian elements as it contains being in this case of indirect derivation.

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[1] See *P. of M.*, ii, Pt. I, p. 61 seqq., and Suppl. Pl. XIV, A, B.

Its 'Hathoric' curls.

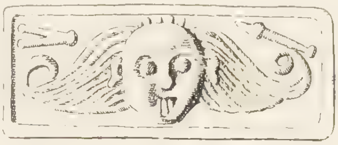

FIG. 284. FACING HEAD OF SPHINX WITH COILING LOCKS. CORNELIAN BEAD-SEAL: CENTRAL CRETE.

The true Egyptian Sphinx, though wingless, was masculine, being an emblematic combination of the King's head with a lion.[3] It was not without its influence, however, on the monumental Sphinxes of the Hittite lands, and these, as we shall see, were also in turn reflected in an interesting type introduced from that side into Minoan Crete, of which this Treasury Deposit has also afforded an illustration.

Of Hittite derivation: distinct from Egyptian type.

Locks of Steatite Sphinx from Drain-shaft, and Comparative Examples.

Among the most curious relics derived from the Treasury Chamber were some steatite objects that came to light with the other remains in the lower part of the drain-shaft above described. These objects, as has been shown by comparative evidence forthcoming since their discovery, form part of the curled locks of a large composite head of a Sphinx, differing alike from Egyptian and from the well-known Minoan class. Unlike the Egyptian, its head is female: unlike the Minoan, it has no wings.

Steatite locks of Sphinx' head from drain-shaft.

The origin of this form of Sphinx points, indeed, in a different direction from either Egypt or Crete. A valuable side-light on it is thrown by a facing type of the Goddess Hathor, showing side-locks terminating in a coil, of which the Cretan hieroglyphic seal Fig. 283 may be regarded as

Oriental comparisons: Hathoric elements.

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[1] See, too, *P. of M.*, i, pp. 276, 277, and Fig. 207, *c* 2 (*c* 3 is erroneously placed there: it belongs to another seal).

[2] See p. 420.

[3] Variations, indeed, of this Egyptian class are known. In an impersonation, for instance, of the Goddess Mut-netem (Wilkinson, *Ancient Egyptians*, iii, p. 310, Fig. 573) her effigy is coupled with the winged body of a lion.

a reflection. The side-locks here are due, it may be thought, to the suggestion of the simple coiling lock that distinguishes her child Horus, itself a survival of very ancient Libyan custom. The portrayal of the Goddess had a special vogue in the Semitic lands and a marked instance of this is supplied by the effigy of Kadesh,[1] representing Astarte on her softer side as a Goddess of love, who is shown standing bare-limbed on her lion, holding a lotus spray in one hand and a snake in the other. At the same time the Hittite princes, who required to have great Sphinxes before their palaces to match their rivals of the Nile Valley, created their own artificial monster by combining the mask of Hathor, showing two curling side-locks, with the body of a lion. Such are the pair of Sphinxes the fronts of which, armed with lions' claws, appear outside the citadel gate at Eujuk.[2]

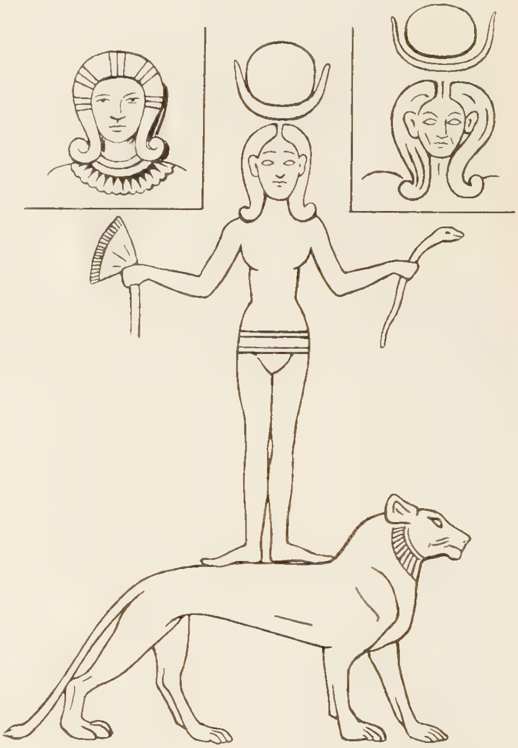

Fig. 285. The Syrian Goddess, Kadesh, showing the Side-locks of Hathor. (After W. Max Müller.)

H. Triada Sphinx of Hittite type.

Supplies key to restoration of Knossian head.

On the discovery by the Italian Mission, at Hagia Triada, of a complete figure, also in dark steatite, of a small wingless Sphinx (Fig. 286), the meaning of the objects from the shaft deposit, previously misunderstood, became clear and the pieces were subsequently fitted together at the Candia Museum as shown in Fig. 288, and the Suppl. Pl. XXXVI. The larger pieces turned out to be two bulging side-locks, leaving a space for the face, which was perhaps carved in some other material. The arrangement of the side-locks in fact resembles the facing head of the Hagia Triada example, which is all in one piece (Fig. 287). The

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[1] See the comparative examples in W. Max Müller, *Asien und Europa*, pp. 314–15, from which the representations in Fig. 285 are taken. He compares certain facing heads of Hathor. The type recurs on a sepulchral stela of Hadrumetum (Perrot et Chipiez, iii, p. 451, Fig. 347), where the Goddess, here Tanit, holds the sun and moon, and on Cypriote stelae. On this Hathor type see also A. C. Merriam, *American Journal of Archaeology*, i (1885), pp. 159, 160: *The arrangement of the hair on the sphinxes of Eujuk.* This facing Hathor type also appears in the field of a cylinder (Lajard, *Culte de Mithra*, Pl. 27, 5).

[2] Eduard Meyer, *Reich und Kultur der Chetiter*, p. 26, further points out that the folded cloth head-gear of the Egyptian male Sphinxes has also left its traces in the Hittite type.

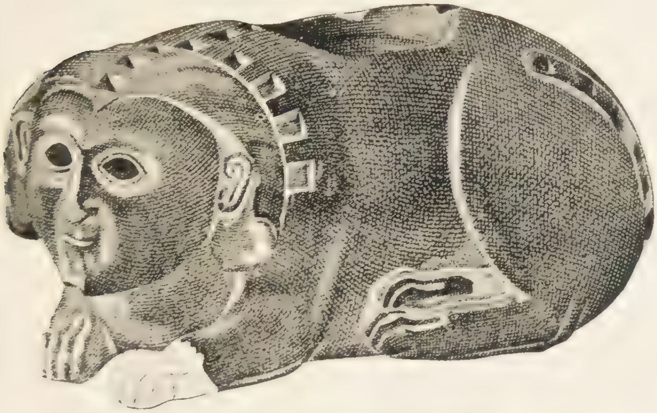

FIG. 286. STEATITE SPHINX FROM HAGIA TRIADA ($\frac{2}{3}$).

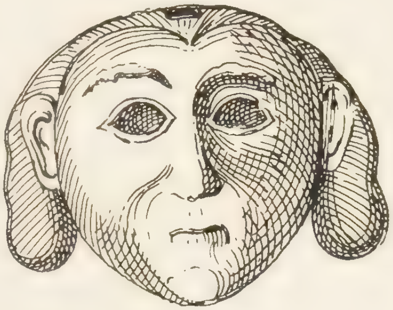

FIG. 287. FACING HEAD OF HAGIA TRIADA SPHINX. (HEIGHT, *c.* 3·3 CM.)

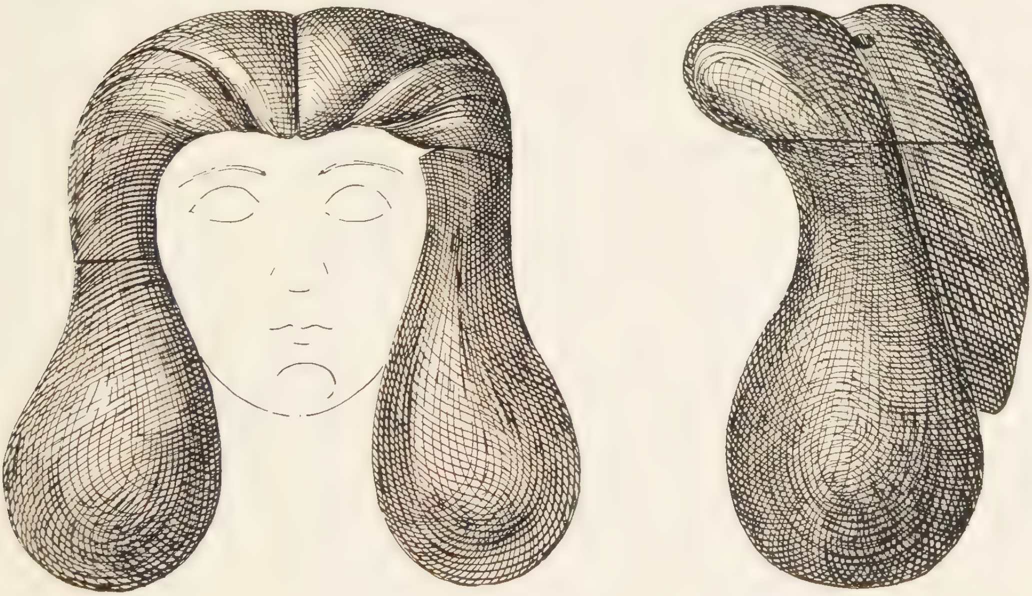

FIG. 288. STEATITE LOCKS OF SPHINX FROM DRAIN-SHAFT DEPOSIT, KNOSSOS, AS FITTED TOGETHER.

height of the bust with the hair above as restored in Fig. 288 is 23 centimetres and the greatest breadth 23·4 centimetres; in the case of the complete specimen Fig. 286 the bust and locks are about 6 centimetres high and the breadth 5 centimetres, so that its total dimensions must have been only about a quarter as great as the Knossian Sphinx.

Twisted locks.

A remarkable feature in the case of the Knossian specimen is the presence of part of another twisted lock of hair (see Fig. 288 and Suppl. Pl. XXXVI, A) fitting on to that in front by means of a rivet, the holes for which are visible. In addition to this was another piece, 10·5 centimetres long, with a slit below and showing on its outer face an elaborate system of plaitwork (Fig. 289). That this also fitted on to the figure must be regarded as fairly certain, and a parallel to it is to be seen in a similar steatite object found at Mycenae (Suppl. Pl. XXXVII, A)[1] showing a series of rivet holes below.

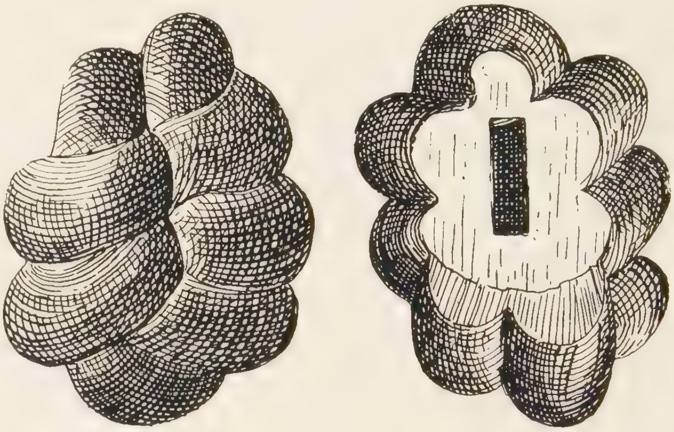

Fig. 289. Plaited Lock of Hair from Head of Steatite Sphinx: Knossos.

H. Triada figure compared with Chaldaean inkstand.

It has been brilliantly demonstrated by Dr. A. Della Seta that the steatite Sphinx of Hagia Triada, with the cup-shaped hollow in its back, is in fact an off-shoot of a distinct class of analogous stone vessels of which three Chaldaean examples in black steatite are forthcoming.[2] Two of these are in the form of couchant bulls with horned and bearded human heads,[3] like the bull with which Izdubar grapples. One of the figures supplies a further point of similarity, its surface showing cavities for the insertion of shell-inlays—partly preserved. In both cases, moreover, the back of the bull has a cylindrical hollow.

The third of these Chaldaean objects presents even more significant features (see Fig. 290). It is in the form of a crouched dog and its surface is engraved with cuneiform characters giving the name of King Sumu-ilum of Larsa,[4]—'the real founder of Babylon's greatness and military power',—whose reign has been fixed as 2204–2176 B. C.[5] What is specially important is that the circular hollow that here also was cut into the animal's back contains a movable vase of cylindrical shape for which the whole figure had served as a stand. From the powdery black material adhering to the sides of the small vessel, Heuzey's conclusion that it had served as an ink-pot[1] seems to be very convincing.

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[1] Athens Museum, No. 2656.

[2] A. Della Seta, *La Sfinge di Haghia Triada*, (*Rendiconti della r. Accademia dei Lincei*, 1907, p. 701 seqq.).

[3] *Op. cit.*, pp. 702, 703, and Figs. 1 and 2 opp. p. 714. They were first published by Heuzey, *Le taureau Chaldéen à tête humaine* (in *Mon. Piot*, 1899, vi, pp. 115–18, and Pl. XI) and *Autre taureau Chaldéen androcéphale* (*ibid.*, 1900, vii, pp. 7–18, and Pl. I.).

[4] L. Heuzey, *Le chien du roi Soumou-ilou* (*Mon. Piot*, 1905, xii, pp. 18–28, Pl. II). Its length is 10·5 cm.

[5] Leonard W. King, *A History of Babylon*, Appendix I, pp. 147–9.

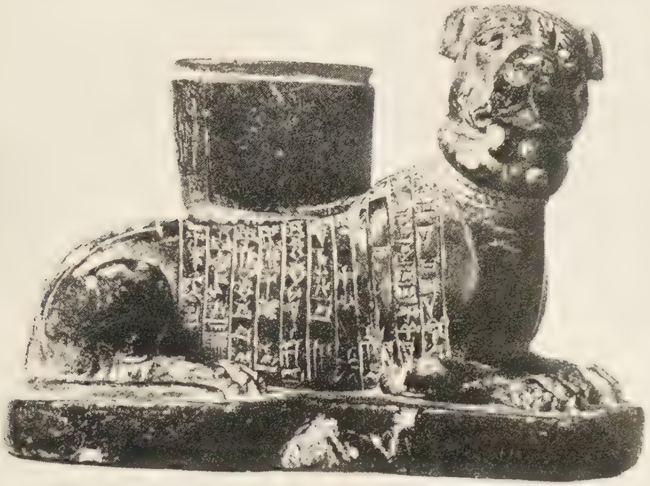
Fig. 290. Chaldaean Inkstand of Dark Stone in Form of a Dog with Name of King Sumu-ilum.

As will be seen from Fig. 286 the little steatite Sphinx from Hagia Triada has the same cylindrical hollow in its back as the analogous Chaldaean figure in the form of a dog — though the vase that it had contained is wanting. We have here in fact an inkstand without the inkpot. The evidence from Knossos has clearly brought out both the existence of ink-written inscriptions, exemplified by the two M. M. III Cups with inscriptions written, apparently by means of a soft reed pen, on their inner cavities in a kind of dark ink or sepia.[2] Complementary to this, moreover, is the further discovery on this and other sites of large deposits of broken clay sealings—notably in the Palace region with which we are dealing—that had evidently served to authenticate documents in perishable materials and which often contain threads of their texture. The Cretans themselves preserved a tradition that palm-leaves had been used by them as a vehicle for writing.[3] More than this, there is also a high probability that Minoan Crete—lying as it were at the gate of Egypt and

Minoan ink-written inscriptions.

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[1] Heuzey, *op. cit.*, p. 26. This explanation of these objects has also strongly commended itself to Della Seta, *La Sfinge di Haghia Triada* (*Rendiconti*, *&c.*, 1907), pp. 707, 708. He rejects, with apparent reason, Heuzey's view (*op. cit.*), p. 25, that the steatite pot within the cavity is a later addition. It fits in with remarkable accuracy and does not cut into the cuneiform inscription round its margin.

[2] *P. of M.*, i, pp. 613–16.

[3] See A. E., *Scripta Minoa*, i, p. 105, where Suidas' statement *s. v.* Φοινικήϊα γράμματα is quoted. Compare, too, Pliny's statement (*H. N.* xiii. 77) 'in palmarum foliis primo scriptitatum'.

continuously indebted to its culture—was as well acquainted with the use of papyrus for writing purposes as was ancient Chaldaea.[1] In every branch at any rate of Minoan Art the papyrus motive itself is of constant recurrence.

It would appear, indeed, that probable enough as is the later Chaldaean use of objects like the stone dog for ink-pots, stands of an analogous type go back to an Age when it is hard to suppose that writing in ink was already practised in Mesopotamia. The most ancient piece of sculpture, in fact, as yet discovered at Ur, is a wild boar in steatite [2] with a rimmed socket above, which clearly belongs to the same class as the stands in animal shape already mentioned (see Fig. 303, at end of Section). Its date goes back to at least the latter half of the Fourth Millenium B. C.

Immediate source of H. Triada Sphinx Hittite.

As in the case of the bull 'rhytons'[3] it will be seen that the Sphinx-shaped 'inkstand' of Hagia Triada supplies another authentic instance of a special kind of Minoan craft of old Chaldaean derivation. In this case we find a similar survival of the ancient practice of inlaying illustrated by the dog-shaped inkstand of Sumu-ilum. But in the present instance we are supplied with clear indications of an intermediate Anatolian link with these remoter Mesopotamian prototypes. The Sphinx here represented, with its Hathoric face and side-locks, belongs, as already shown, to the Hittite monumental class. This resemblance moreover extends to certain technical and stylistic details, including the curious compromise between sculpture in the round and simple relief evidenced by the insertion of the further hind-leg above the nearer on what, from the slight turning round of the head, was evidently intended to be the more visible side of the object. A similar artistic liberty is taken with a colossal lion in the round at Sendjirli.[4]

An imported object.

The whole style of the Hagia Triada Sphinx is foreign to Minoan Art, and the points of agreement with Hittite monumental tradition are so obvious that there can be little hesitation in concluding that it is itself an imported object of Anatolian fabric.[5] In conformity with this conclusion the Knossian example, though of larger scale and variant in its details, must also be reasonably regarded as having reached the Island from the same source. If it was used as any kind of receptacle it must have been one of much greater capacity.

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[1] A. H. Sayce, *The Use of Papyrus as a Writing Material among the Accadians* (*Trans. Soc. Bibl. Arch.*, i (1872), pp. 343–5); G. Maspero, *Hist. Anc. des peuples de l'Orient Classique*, 1895, i, p. 724. See Dr. Della Seta, *op. cit.*, p. 707 and n. 1.

[2] C. Leonard Woolley in *The Times*, Feb. 11, 1930. Fig. 303 is taken, by permission, from the representation there given. The object is 4½ inches long.

[3] See *P. of M.*, ii, Pt. I, p. 260 seqq, and Figs. 156, 157.

[4] E. Meyer, *Reich und Kultur der Chetiter*, p. 61, Fig. 49.

[5] Dr. Della Seta, *loc. cit.*, p. 714, insists on the 'Asiatic' origin of the object, but his direct comparisons are with Hittite Art. Dr. H. R. Hall, *Aegean Archaeology*, p. 201 and note 2, takes the same view.

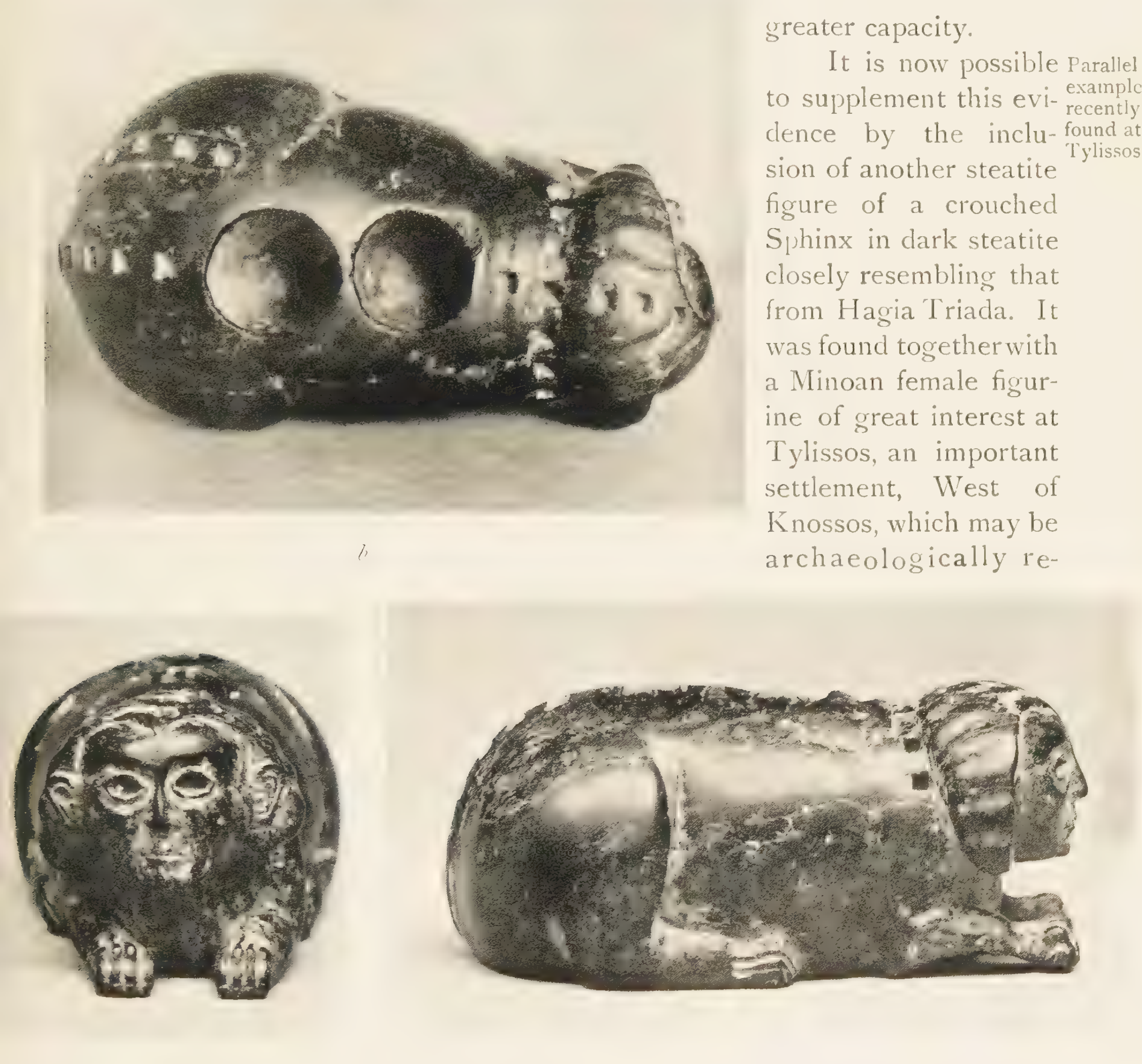

Fig. 291. *a*, *b*, *c*, Steatite Sphinx from Tylissos (*c.* $\frac{2}{3}$).

Parallel example recently found at Tylissos.

It is now possible to supplement this evidence by the inclusion of another steatite figure of a crouched Sphinx in dark steatite closely resembling that from Hagia Triada. It was found together with a Minoan female figurine of great interest at Tylissos, an important settlement, West of Knossos, which may be archaeologically regarded as an offshoot of the great Minoan Centre. Thanks to the great courtesy of its possessor, Dr. G. F. Reber, I have been able to illustrate this object, which in its style and dimensions as well as most of its details stands very near the other, and was obviously of contemporary fabric (see Fig. 291).

Its front aspect (Fig. 291, *a*) with its Hathoric side-locks and clawed feet is almost identical. We have here, too, the same cavities for inlays arranged like a collar round the neck and in an intermittent row along the top of the head and along the back curling round at the tail. It will be seen that some of these show remains of white inlaying material. There are here, however, two rounded sockets on the back instead of one, and it is possible that one of these may have contained red pigment. The linear inscription on a 'stirrup vase' from Orchomenos[1] is limned in red letters.

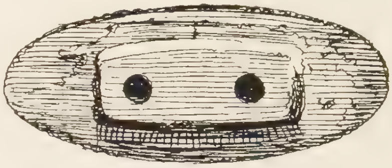

Fig. 292. Under Side of Base of Steatite Figure from Tylissos ($\frac{3}{2}$).

Minoan female figurine of steatite found with sphinx at Tylissos.

In contrast with the steatite 'inkstand', clearly belonging to a class of objects imported from the Anatolian side, was a small female figurine said to have been found with it on the site of Tylissos,[2] the style of which is undoubtedly Minoan. A drawing of this little figure enlarged by one-half in order the better to illustrate its small details is given in Fig. 293. Its base (Fig. 292) has a projecting tenon to fit into a stand, this projection moreover showing two small perforations for metal pins by which its attachment was further secured.

The flounced skirt and small girdle is quite characteristic, and the 'aprons' in front and behind present a border decorated with ringed disks and closely approximating to that of the 'Fitzwilliam Goddess'[3]. The breasts are well developed. The details of the bodice can, unfortunately, no longer be made out, but the coiffure presents a novel fashion. It somewhat suggests the peak of a hood, but is in a separate piece with a short row of conventional curls appearing behind, and longer locks on either side of the face. Though the features have suffered it is clear that they were well modelled.

Peaked cap—a novel feature

The attitude with the arms laid on the sides of the skirt has no very apparent significance and nothing is held in the hands.

The figurine is cut out of dark brown steatite, made in one piece, and a good deal of its interest lies in the surface decoration, which is still fairly preserved. It seems to have been covered with a thin coating or *engobe* of white plaster, the patterns of the dress being subsequently rendered in a red ochreous tint.

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[1] A. E., *Scripta Minoa*, i, p. 53, Fig. 31 (H. Bulle, *Die Woche*, 1904, p. 216).

[2] This figurine 'migrated' in company with the Sphinx. In all these cases the certainty of the finder that he will not receive adequate remuneration from the constituted authority leads where possible (generally after an interval of seclusion) to secret exportation, and the sources of scientific information are hermetically sealed.

[3] This corroborates the genuineness of the Cambridge statuette.

The whole is good sculptural work, answering in style and many details to the faïence figures of the 'Temple Repositories', and dating from the same fine transitional epoch, the advanced phase of M. M. III. This corresponds with the approximate date of the steatite Sphinxes, which in the case of the remains of the Knossian example is well ascertained as belonging to a Treasury deposit of that epoch. The statement that the figurine was found at Tylissos in company with the Sphinx illustrated in Fig. 291 is therefore so far confirmed.

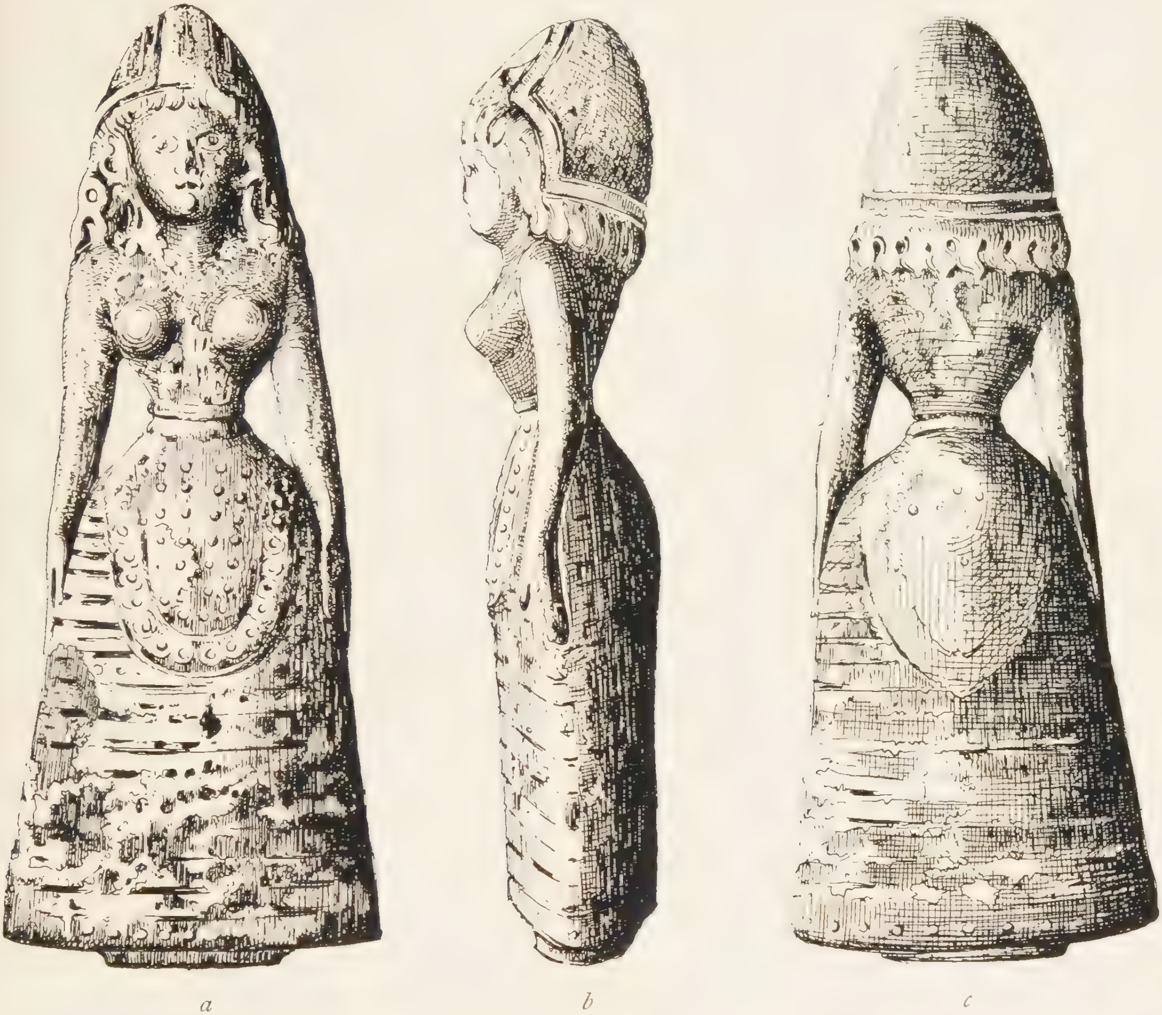

Fig. 293. Steatite Figurine from Tylissos with Painted Surface ($\frac{3}{2}$).

Ivory Deposit with Acrobatic Figures.

The deposit of ivories.

Among the relics derived from the Temple Treasury the most remarkable group was that of the ivories already referred to as having been found in the little Closet beneath the 'Service Stairs'. Certain relics found with them, such as the fragments of a crystal bowl, were shared by the deposit found beneath the floor of the Storeroom, separated from the first by a narrow passage-way—a circumstance explained by the derivation of both deposits from the Treasury above. That the ivory relics found in the Closet presented a more or less homogeneous character finds its natural explanation in their having been originally contained in a separate chest, and a mass of carbonized woodwork found with these seems to show that the chest in which they were contained had fallen on this side.

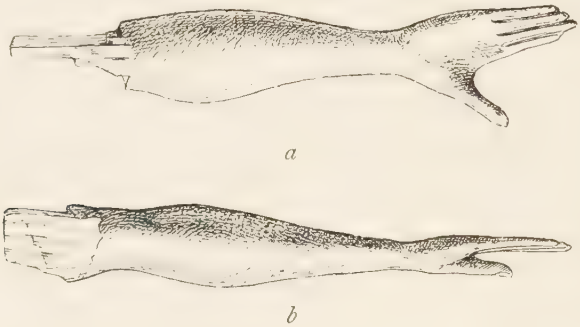

Fig. 294. *a*, *b*, Ivory Forearm of Leaping Youth ($\frac{3}{2}$).

Figures of acrobatic youths.

What specially characterized this 'Ivory Deposit' was the remains of a series of figurines representing youths—approximately of the same scale, but with some slight differences in detail—in the familiar act of springing down as if to grapple the heads of charging bulls. The possibility that one or other of the fragmentary limbs discovered may have belonged to a figure of a female acrobat must also be borne in mind.

Arms and legs.

A head, forearms, and legs are reproduced to natural scale in Suppl. Pl. XXXVIII. The parts of the body were cut out of solid ivory, and the joints with which the members are fitted into corresponding sockets are well shown by the forearm, Fig. 294, *a*, *b*, there enlarged by one-half. It will be seen that in some cases the wrists and ankles are encircled with bracelets and anklets, and the lower part of the leg reproduced in Suppl. Pl. XXXVIII, *c*, bears clear traces of a kind of 'mocassin', gradually tapering to a point slightly upturned, like those worn by the taureadors of the frescoes.[1]

The arm reproduced in Fig. 295 ($1\frac{1}{2}$ scale) gives a good idea of the fidelity in detail. While the biceps and succeeding supinator are here well indicated, the extensors of the wrist and hand are shown in full action, and the veins on the back of the hand and even the finger-nails are minutely rendered. The curiously extended thumb is a conventional Minoan trait.

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[1] Coloured Plate XXI.

The leaping youth: marvellous *élan* of figure.

The most remarkable of these figures belongs to a series of at least three similar youths in the act of leaping, with the head thrown back and extended arms.[1] Only in one case, however, was enough of the trunk preserved to allow the reconstitution of the whole figure, which was approximately 29·9 centimetres (about $11\frac{3}{4}$ inches) in height (Fig. 296). The waist alone was here wanting and has been supplied in wax: it had doubtless been surrounded by a metal girdle.[2] The natural treatment of the individual parts of the limbs and body is everywhere apparent. The well-set arms and shoulders and strongly developed pectoral muscles point to careful physical training, and the limbs, though slender, reveal great sinewy force.

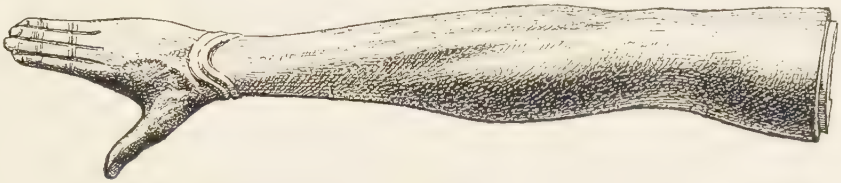

FIG. 295. IVORY ARM OF LEAPING YOUTH ($\frac{3}{2}$).

The life, the freedom, the *élan* of this ivory figure is nothing short of marvellous and in some respects seems to overpass the limits of the sculptor's art. The graceful fling of the legs and arms, the backward bend of the head and body, give a sense of untrammelled motion, to a certain extent attainable in painting or relief, but which it is hard to reconcile with the fixity of position inherent in statuary in the round. How were such figures supported? Not certainly by their taper feet or delicate fingers. It may be conjectured that they were in each case actually suspended in a downward-slanting position from the girdle by means of fine gold wires or chains, recalling in this the *amorini* of Hellenistic jewellery and terra-cottas.

Chryselephantine Art.

The girdle itself, like the flowing locks of hair, originally, as we shall see, attached to the head, was probably of bronze with a gold plating. The loin-cloth—which was certainly not wanting—may have been supplied by thin gold plating, some of which was found with the figures. The work in fact was chryselephantine, and the further question suggests itself, may not

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[1] When found the fragments were in a very friable condition, but they were at once soaked in a solution of wax and paraffin at high temperature. By this means a good deal of their original consistency was restored, and the surface at the same time cleared of impurities.

[2] Cf. A. E., *Knossos, Report* (1902), pp. 72, 73. The earthquake of 1926 again broke the figure into two halves, but the restoration was easy.

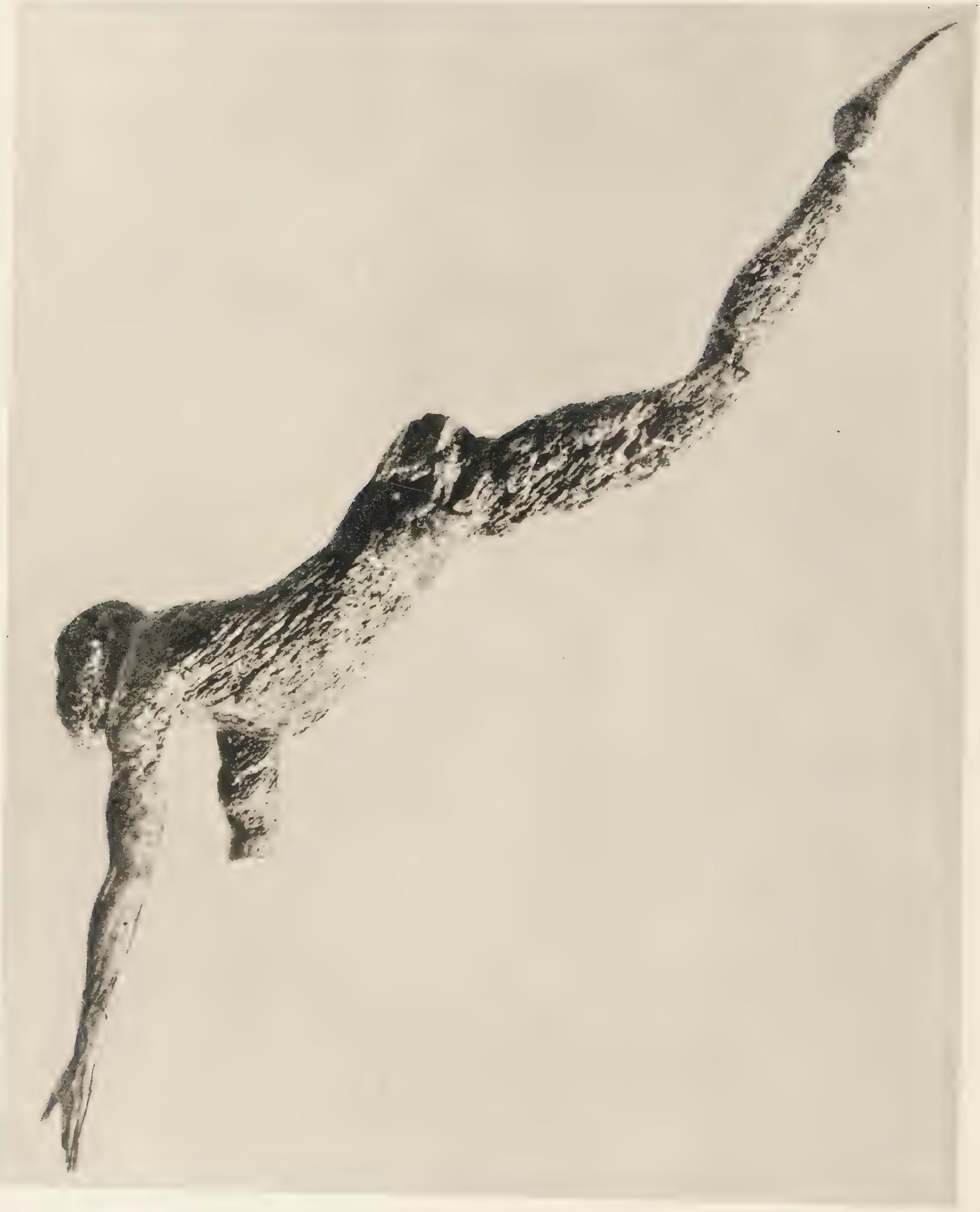

Fig. 296. Ivory Figurine of Leaping Youth: Height, 29·9 cm.

the ivory itself have been tinted? No trace of this is at present discernible, but the bone arrow-plumes described above[1] from the Temple Repositories were picked out with deep red, and the taste for varied hues is such an universal characteristic of Minoan art that we may well believe that the male figures at least were originally stained a ruddy hue. The practice of staining ivory, attributed by Homer to the Carian and Maeonian women,[2] may well have been a Minoan inheritance.

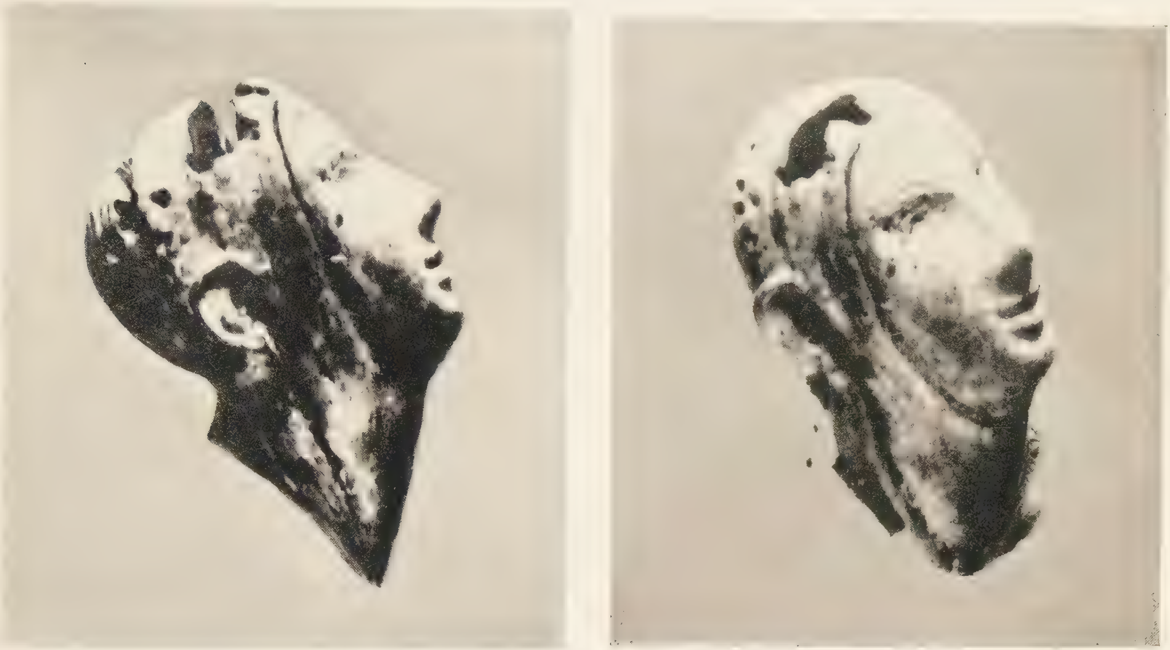
a *b*

Fig. 297. *a*, *b*, Head of Youth: Ivory Deposit ($\frac{3}{2}$).

Heads and faces.

The face of the youth given in Fig. 296 had a good deal suffered, and a better idea of the average amount of success attained in portraying human features can be gained from the specimen shown in Fig. 297, *a*, *b* (enlarged 1½). It will be seen that, as usual, it falls behind the treatment of the limbs. A much greater power of expression is shown in the ivory figures of the Goddess and boy God to be described below.

A characteristic feature of these youthful performers as seen on wall-

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[1] *P. of M.*, i, pp. 548, 549, and Fig. 399, *a*.

[2] *Iliad* iv. 141:

‘ ὣς δ’ ὅτε τίς τ’ ἐλέφαντα γυνὴ φοίνικι μιήνῃ
Μῃονὶς ἠὲ Κάειρα, παρήιον ἔμμεναι ἵππων.’

Curled flying locks: bronze, gold-plated.

paintings and intaglios is the locks of hair that fly out behind the head as an indication of rapid descending motion. In the case of the ivory figures these locks took the form of spirally twisted wires of gold-plated bronze. The socket holes for these are seen in Fig. 297, *a*, *b*, showing the head of a leaping youth as well as in Fig. 299 giving the top of the same head, enlarged to two diameters. In some cases the bronze wires[1] showed remains of a coating of thin gold plate. In the somewhat fragmentary head given in Fig. 298, *a*, *b*, one curling lock and remains of others—a good deal contorted—are seen still attached. Rows of holes above the forehead are noticeable in all cases for the attachment of a kind of fringe of curls (Fig. 299), according to a fashion prevalent with both sexes. This fringe as a female ornament is well illustrated by some remarkable specimens to be described below.[2]

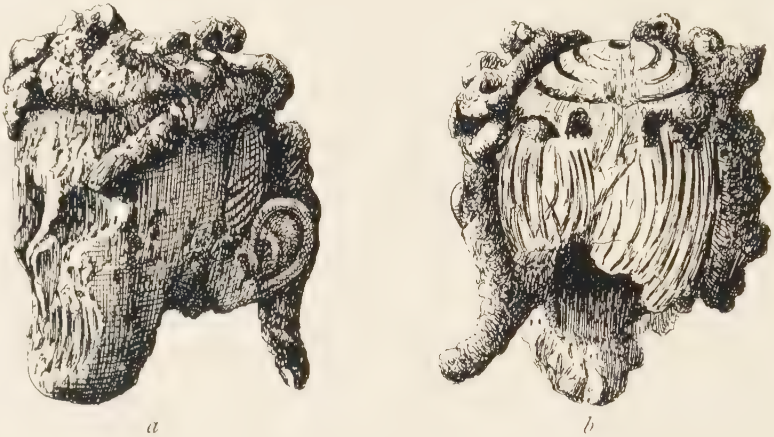

FIG. 298. *a*, *b*, IVORY HEAD SHOWING WIRE TRESSES PARTLY ATTACHED ($\frac{2}{3}$).

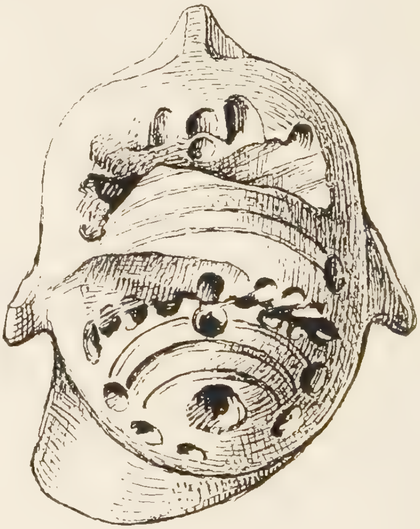

FIG. 299. UPPER VIEW OF IVORY HEAD, SHOWING HOLES FOR ATTACHMENT OF WIRE TRESSES ($\frac{2}{1}$).

A specimen, otherwise much defaced, sketched by Mr. Theodore Fyfe in Fig. 300, *a–c*, shows a mortise hole in the back of the neck indicating the manner in which it was attached to the trunk. So far as the evidence goes the figures to which these fragments belonged were all engaged in acrobatic action of a similar kind. At full stretch, as shown in Fig. 296,

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[1] The locks were formed of two separate wires twisted round each other, each wire having its separate socket.

[2] See below, p. 519 seqq., and Fig. 364.

Part of larger arm: from S. slope.

they could in no case have exceeded a foot in height. That larger ivory figures of an athletic type and in a different attitude existed is proved by the finely sculptured fragment reproduced in Fig. 301. This, however, was found in disturbed earth on the South Slope and there is no evidence for bringing it into connexion with the present deposit. It seems to be part of a bent arm with a highly developed biceps, such as is seen below [1] in the case of the painted stucco high-relief, Fig. 348 A, showing part of a wrestler. The figurine to which this ivory fragment belongs may have stood 15 inches high.

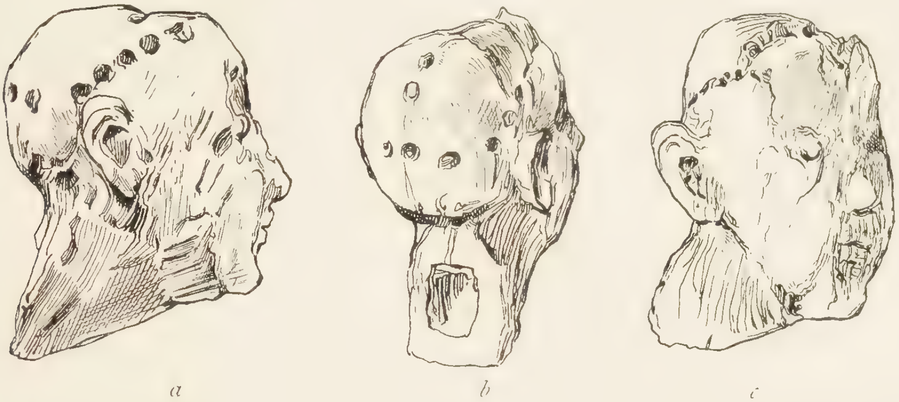

FIG. 300. *a*, *b*, *c*, HEAD OF IVORY FIGURINE: *b*, SHOWING MORTISE HOLE IN NECK ($\frac{1}{1}$).

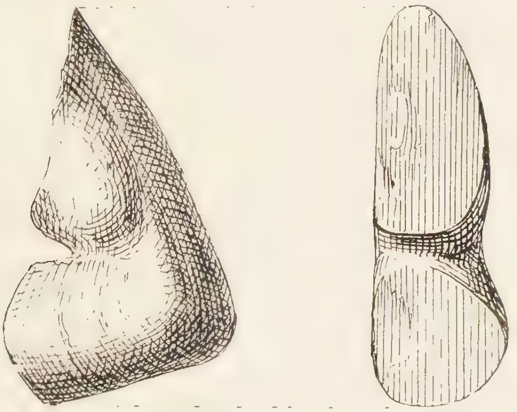

FIG. 301. PART OF ARM OF IVORY FIGURE ($\frac{1}{1}$).

Figures engaged in sports of bull-ring. These under divine patronage.

The acrobats with which we are at present concerned were clearly taking part in sports of the bull-ring, of the kind already abundantly illustrated above by frescoes, small reliefs, and intaglios. There is, moreover, sufficient evidence to show that the sports of the Palace arena took place under the direct patronage of the Minoan Goddess whose shrine on the 'Miniature' frieze appears between the Grand Stands and surrounded by spectators. Here, too, the divine participation is indicated by the 'Miniature' fresco fragments (Figs. 141 and 142, above) [2] found with the ivories, which included, besides parts of the coursing bulls, a section of the façade of a shrine decorated with the sacred Double Axes.

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[1] See p. 502, and Fig. 348 A.

[2] See p. 34 and p. 207.

Faïence head of bull found with ivories.

The coursing bulls, too, seem to have been represented in concrete form, though in a more composite manner. With the ivories, and corresponding with the prevalent scale of the figures, there was found the head of a bull of whitish faïence with gold tubes for the insertion of the horns and blue glass eyes set, apparently, in shell (Fig. 302). The somewhat abraded condition of the head made it uncertain whether, as is probable, it had markings on it as in the case of the faïence cow from the Temple Repositories,[1] but the preference given to this material, in place of ivory, for the animal figures is best explained by the convenience it afforded for rendering the characteristic markings. In any case, this figure presents a remarkable example of the composite use of materials that played so large a part in Minoan craftmanship and which attained such extraordinary perfection in the case of the bull's head 'rhyton' from the 'Little Palace'[2] with its shell and jasper inlays and the crystal eyes with their scarlet pupil and black iris.

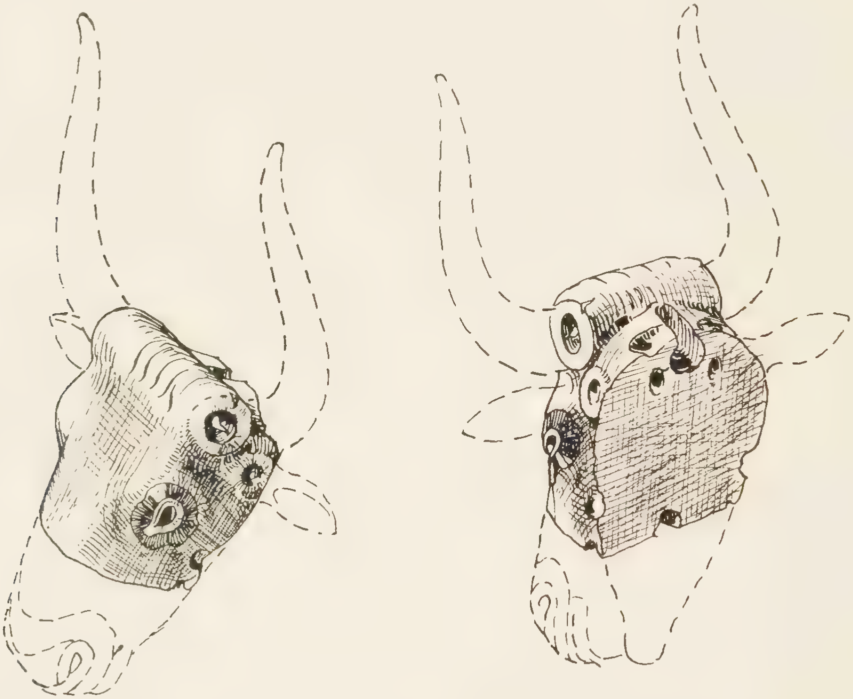

FIG. 302. BULL'S HEAD OF WHITE FAÏENCE WITH GOLD TUBES FOR INSERTION OF HORNS AND BLUE GLASS EYES. IVORY DEPOSIT.

Gold tubes for horns and glass eyes.

The various concomitants, including not only the suspended acrobats but bulls executed in the round, suggest that we have to do with an actual miniature model of a Minoan arena in which the painted stucco representation of the shrine, marked by the sacred symbol of the Goddess, may have taken its place, as on the fresco, beside the Grand Stands. A miniature copy in bone of the capital of a 'theatral' column actually occurred in another part of the deposit.

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[1] *P. of M.*, i, p. 511, Fig. 367.

[2] *Ibid.*, ii, Pt. II, p. 527 seqq., and Figs. 330–2.

A miniature Minoan *corrida*.

Nor does the idea of such a miniature reproduction of the Minoan *Corrida*, and its accompaniments, stand alone. An instructive parallel on more purely religious ground may, in fact, be seen in the remains of the 'Terra-cotta Shrine' already described, with its windowed cell, its altar set with sacral horns, the little clay imitations of the conch-shell trumpets that summoned to devotions, and its doves with spotted wings perched on the columns that they infused with celestial spirit.

Perhaps exposed in sanctuary.

The contemplation of such a model, complete in all its details, was, no doubt, edifying to the devout, and miniature reproductions of this kind may have themselves found a place in sanctuaries, like a 'presepe' in a Church. In Southern Italy, at least, the making of these small models goes far beyond this. The dramatic action itself is reproduced by mechanical means; with a tap-tap-tap nails are hammered into the Cross, there is a beating of rods, a creaking of concealed revolutions, and the sacred puppets move their heads and limbs.[1]

That in the Minoan case actual motion and sound was imported into these miniature circus models is highly improbable. But the scenic background and the highly realistic figures of the acrobatic performers, suspended in the air and reaching towards the coursing animals below, must have gone far to produce a sufficiently realistic effect.

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[1] I once had an occasion to witness a small puppet-show of this religious kind at Naples.

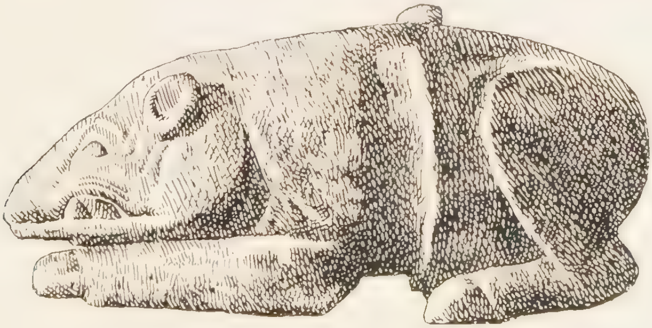

FIG. 303. SUMERIAN STEATITE OBJECT IN FORM OF A BOAR: FROM UR.

§ 87. CHRYSELEPHANTINE FIGURINES OF 'BOSTON GODDESS' AND BOY-GOD CONNECTED WITH IVORY DEPOSIT: THE MOTHER GODDESS AND CHILD.

The acrobatic ivory figures connected with bull-ring; Religious elements of Treasury Deposit—miniature bronze Double Axes and part of shrine on fresco; the Sphinxes; Were there also images of divinities? Facilities here for abstraction; 'Boston Goddess': parallel to Knossian Snake Goddess—Knossos its probable source; Locks secured as in acrobatic ivories; Physiognomy individual and modern; Emergence of ivory boy-God, in the same style and probably from same Knossian source; Fragments of steatite cup with male heads in relief; Ivory figurine of boy-God, as found; Belt already fitted to child's body; Very young infants beltless—Palaikastro examples; Rivet-holes in ivory figurine for gold-plated belt and kilt; Girdles on young girls; Proportions of boy-God; Comparative girth of adult male figure; Adaptation of human form to early waist constriction; Looser belts worn by elderly men; Tight waists begin with M. M. III; Boy-God on tiptoes and adorant; Delicate execution of toes; Foot of M. M. II a *figurine; Waving hair and features of boy-God—recall 'Boston Goddess'; Correspondence in height; Same group—Mother and adoring Child; Matriarchal stamp of Minoan Religion; Same Goddess with various attributes; Youthful male adorants—fine bronze example; Adorants on signets; Armed youthful male figure grouped with Goddess; Adult warrior God exceptional till latest Minoan epoch—figures of Resheph; Mourning scene for youthful warrior God on Minoan signet; Minoan Goddess, resurgent as Gaia; Unarmed boy-God—Oriental parallels; Minoan versions of Mother and Child; Terra-cotta idol from Knossian tomb; Adoration scene on Thisbê signet; Goddess with child on lap, holding cymbals; Adorant warriors bearing gifts; Reeds borne, as in honour of Cybelê; Metal vessels as offerings; Adoration of Magi compared—Christian version on ring-stone; Thammuz at Bethlehem.*

The acrobatic ivory figures connected with bull-ring.

ALTHOUGH the evidence is, in the nature of things, very imperfect, it tends to show that the ivory figurines above described—contained, apparently, in a special Chest—were connected with some miniature model of the Palace bull-ring and its appurtenances. The feature that most distinguishes them, the gold-plated wires stuck into their heads, representing coiling tresses mostly flying out from them, had indeed a special importance in connexion with the sport, since they indicated the direction of flight through the air. The long locks, fashionable with both sexes, were in fact constantly used, sometimes in a rather mechanical fashion, by Minoan artists, to convey definite ideas of motion and, apart from the bull-grappling scenes, the upward flying tresses often serve to give a pictorial idea of the descent of a God or Goddess.

Religious elements of Deposit: Double Axes and fragments of 'miniature' painted shrine.

The carved figures found in the Deposit, however, were, as already observed, entirely of an acrobatic character and marked as *sui generis* by their flying metal curls. There was no trace of ivory images bearing a divine character.

That the Treasure Chamber had contained such ivory, or rather chryselephantine figures of the Minoan Goddess or her Votaries—such as were found in the 'Temple Repositories'—is itself only what we should have expected, the more so when the Miniature Fresco is borne in mind depicting part of a façade of a pillar shrine of the Double Axe Cult.[1] The occurrence indeed of the two Double Axes of the ritual type in gold-plated bronze[2] points even more clearly to this religious association. We recall, indeed, the divine figures found beside the Double Axes that rose from between the Sacral Horns in the later shrine near by.

The Sphinxes.

To this, too, must be added the discovery of the remains of an ivory Sphinx of the finest artistic execution as well as of the imported steatite example of the Hittite class.

The richness of the remains as a whole, in spite of most careful plundering in ancient times, certainly seems to imply that they were derived from the Treasury of a Shrine. Where precious metals had been so laboriously abstracted by ancient pillagers, the occurrence of such quantities of gold foil and of a massive gold pendant, as well as of the beautiful gold fish, was itself remarkable, and the crystal bowl and *pyxis*-cover, and the various inlays equally bespeak an exceptionally precious hoard. The sports in which the marvellous ivory figures of the leaping youths must be supposed to have been engaged were themselves in honour of the Great Minoan Goddess.

Were there also images of divinities?

Might there have existed remains of some other carbonized chest, containing images of more sacred import?

Nothing more came out, in spite of the most exhaustive investigations, including supplementary excavations beneath the lower floors. Yet the lacuna in the evidence was only too patent. At the same time the complicated structural environment from which the remains of the original Treasure had been gradually extracted and reassembled—below the later pavement of the small lower store-room, under the floor of a narrow closet beneath the 'Service Stairs', in the lower section of a stone ventilating shaft, and in the

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[1] See above, p. 207, Fig. 141.

[2] See above, p. 414, Fig. 277.

Facilities here for abstraction.

adjoining cavity of a great stone-built *cloaca* with various avenues of subterranean access—would have given quite exceptional facilities for surreptitious abstraction.

In the case of the disappearance of certain inscribed tablets from the 15th Magazine in the West Quarter of the Palace some accidental clues, supplemented by exact evidence supplied by the clay documents themselves, led eventually to the conviction of one of our workmen, Aristides—'the unjust'. But in the case of this Eastern Treasury no such evidence was forthcoming.

Nevertheless, it is not too much to say that, owing to a remarkable chain of circumstances, there seems to be a high probability that, as regards its most essential features, the lacuna in our evidence has been since supplied.

Chryselephantine figure of 'Boston Goddess': parallel to 'Knossian Goddess'.

For the nearest parallel to the 'Lady of Knossos', as represented by her faïence image from the 'Temple Repositories', we naturally turn to the remarkable chryselephantine figurine, known from its present home as the 'Boston Goddess' (see Fig. 305). She is robed in a flounced skirt of the same fashion, with indications of similar small aprons[1] contained by a narrow girdle, here of gold, and above it is the same tight-fitting jacket with short sleeves and cut low in front so as to expose her full breasts.[2]

She, too, wears a tiara, though of a different form with several peaks, and here, too, holds out in her two hands and coiled about her forearms[3] the snakes—in this case of wrought gold with protruding tongues—that symbolize her dominion of the Nether World. This, indeed, is the Goddess of Knossos in her most characteristic aspect as a chthonic divinity and under the form in which she had most need to be invoked in this earthquake-stricken land.

The snakes themselves afforded an admirable example of proficiency in goldsmiths' technique.[4] The body of each was formed of a flat strip of fairly thick gold, made thicker and more tubular as it passed between the

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[1] The holes for the nails or rivets to attach this clearly show the rounded outlines of the apron in front of the statuette. According to the prevalent fashion of the epoch to which the figure belongs, a small apron of this kind was worn behind as well as in front. Good examples of these are shown in the Tylissos figurine, p. 449, Fig. 313, below. Compare, too, the 'Snake Goddess' and her Votaries, *P. of M.*, i, p. 500 seqq.

[2] The right breast shows a nipple in the shape of a small gold nail.

[3] The right arm and part of the snake round it have been restored. In the *Museum of Fine Arts Bulletin*, xii, 1914, p. 52, a confusion occurs where it is stated that a few fragments of the left arm are preserved. It is practically complete. (See L. D. Caskey, *Am. Journ. of Archaeology*, second series, vol. xix, p. 246, Fig. 6.)

[4] See Caskey, *Am. Journ. of Arch.*, *loc. cit.* (pp. 246, 247, and Fig. 6).

Golden snake of 'Boston Goddess'

fingers, and then flattened out again and cut in the shape of a head. A similar piece was attached to this below for the lower jaw, and the tongue was inserted between these by means of three rivets, the heads of two of these supplying the eyes (see Fig. 304). They seem actually to hiss as the Goddess holds them out.

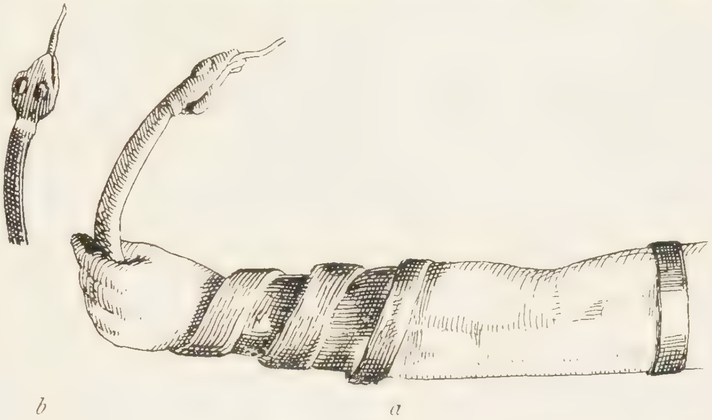

Fig. 304. *a*, Ivory Arm of 'Boston Goddess' with Golden Snake coiled round it, and Hand grasping it below the Head; *b*, Head of Snake seen from above (enlarged 2 diams.).

Like some of the female votive figurines of clay from Petsofà[1] and the marble statuette of the Minoan Goddess now in the Fitzwilliam Museum,[2] this ivory image was made in two pieces. These were secured by means of a projection at the back, running up from the lower half and secured in a corresponding socket in the upper piece of a cylindrical ivory pin. The joint was partly concealed by the gold band forming the hem of the second flounce. The height of the figure, as restored, is given as 0·161 m. or about 6½ inches.

Mr. L. D. Caskey who first published the statuette and superintended its reconstitution at the Boston Museum[3]—itself a masterpiece of the results of patient skill—has thus expressed the general conclusion to which he was led regarding its affinities. 'The resemblances described suffice to show that the Snake Goddess is a work of the same period and school, perhaps even of the same atelier that produced the ivories from Knossos.'[4]

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[1] J. Myres, *B. S. A.*, ix, p. 367.

[2] A. J. B. Wace, *A Cretan Statuette in the Fitzwilliam Museum* (Cambridge, 1927), p. 4. The Lyre Player and dancers from Palaikastro, of L. M. III *b* date, show the same dual formation (R. M. Dawkins, *B. S. A.*, x, pp. 217 seqq.). See above, p. 73, Fig. 41.

[3] Mr. Caskey's first publication of it was in the *Museum of Fine Arts Bulletin* (Boston, Massachusetts), vol. xii (1914), p. 51 seqq. He described it in a more amplified form in the *American Journal of Archaeology* (second series), vol. xix (1915), with numerous photographic plates and figures. It was presented to the Museum by Mrs. W. Scott Fitz. The fragmentary state of the remains before reconstruction can be gathered from Pl. XV. The repairs were due to Mr. Paul Hoffman at the Museum.

[4] L. D. Caskey, *A Chryselephantine Statuette of the Cretan Snake Goddess* (*Am. Journ. of Arch.*, xix (1915), p. 247).

Knossos probable source of Boston figure.

According to trustworthy information obtained by Mr. Caskey,[1] this chryselephantine figure had come originally from Crete: he adds, however, that 'no details of the time, place, and circumstances of its discovery have been ascertained'. It is now allowable to say that my friend, the late Mr. Richard Seager—whose premature death has extinguished so many hopes of Cretan exploration—saw the fragments, together with a good deal of dust of decayed ivory that could never be reconstituted, in private hands at Candia shortly before the Great War. Like all those connected with the excavation, he himself shared the belief that they had been obtained—in all probability, some years previously—from the Palace site of Knossos. I even found a direct tradition rife among our older workmen of the surreptitious removal of ivories from the same part of the area from which the relics of the 'Treasury' were brought to light. More cannot be said; but none need regret that the Knossian Goddess—so admirably reconstituted—should have found such a worthy resting-place and that she stands to-day as a Minoan 'Ambassadress' to the New World.

Locks secured as in acrobatic ivories.

Fig. 305, from photographs kindly supplied me by Mr. Caskey, gives full-sized representations of the Statuette as seen facing and in profile on the left. The side view here brings out the sweeping curve of the back due to the throwing back of the head and neck—a very characteristic feature of Minoan pose. This is well shown by the faïence statuette—either the Snake Goddess herself or a Ministrant with her attributes—from the Temple Repository at Knossos, here for the first time reproduced in Fig. 306, as fully restored, with the pard seated on the crown of the head. But in the Boston figure we miss something of the corresponding prominence of the buttocks and thighs, the consequence no doubt of the great loss of the internal material, much of which had been reduced to powder. The holes above the forehead and temple, best seen in Fig. 307 below, which had certainly served for a row of short golden curls, find an exact parallel in the head of a youth from the 'Deposit of Ivories' sketched above in Fig. 300. Actual bronze locks that had been affixed in the same manner to a figure of superhuman size, the core of which was certainly of wood, will receive illustration below in connexion with the great 'East Hall' of the Knossian Palace.

Physiognomy individual and modern.

What, however, must be regarded as the most remarkable characteristic of this chryselephantine statuette is the physiognomy itself (Fig. 307, *a*, *b*). It is a curiously modern type. The eyes are sunk to their natural depth below the brow, a method of treatment practically unknown to ancient Art of any

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[1] L. D. Caskey, *op. cit.*, p. 237.

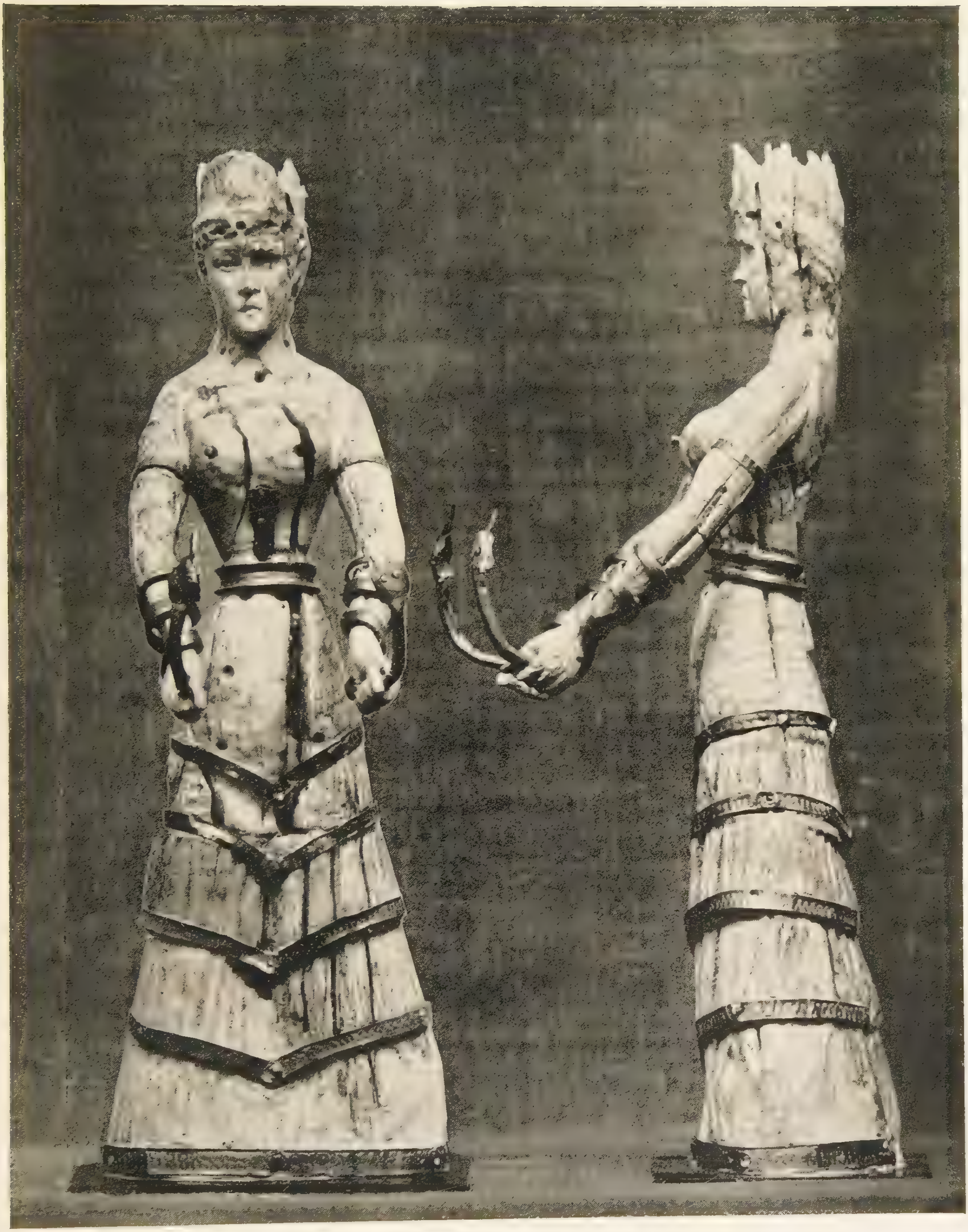

FIG. 365. CHRYSELEPHANTINE FIGURE OF THE SNAKE GODDESS OF KNOSSOS, IN THE BOSTON MUSEUM. (*c.* $\frac{1}{1}$)

kind before the Fourth Century B.C.[1] The eyelids are here accentuated, the lower being set into the upper with a delicate effect in the shadowing. The pupils are indicated by drilled holes. The upper lip somewhat protrudes and the finely cut though dilated nose is slightly 'tip-tilted', giving an impression very different from that produced by the rather classical profile of the 'Fitzwilliam Goddess'. It might be the head of a young girl of to-day and, unlike most Minoan representations, bears a personal stamp. That it reflects so manifestly the individual style of an artist will be found to be of great interest when we come to compare it with what seems to be a complementary work belonging to the same group.[2]

Though the back of the head is not so well preserved, there are traces of the hair falling down behind in natural tresses, which again closely compare with those of the young boy seen in the fellow production.

Emergence of ivory boy-God in the same style.

So fine is the whole execution of this head that, as has been rightly observed, it gains rather than loses by its enlargement to three diameters as in Fig. 307,—an observation also true of the closely related little male figure.

For a second remarkable resurgence from the soil of Crete has brought

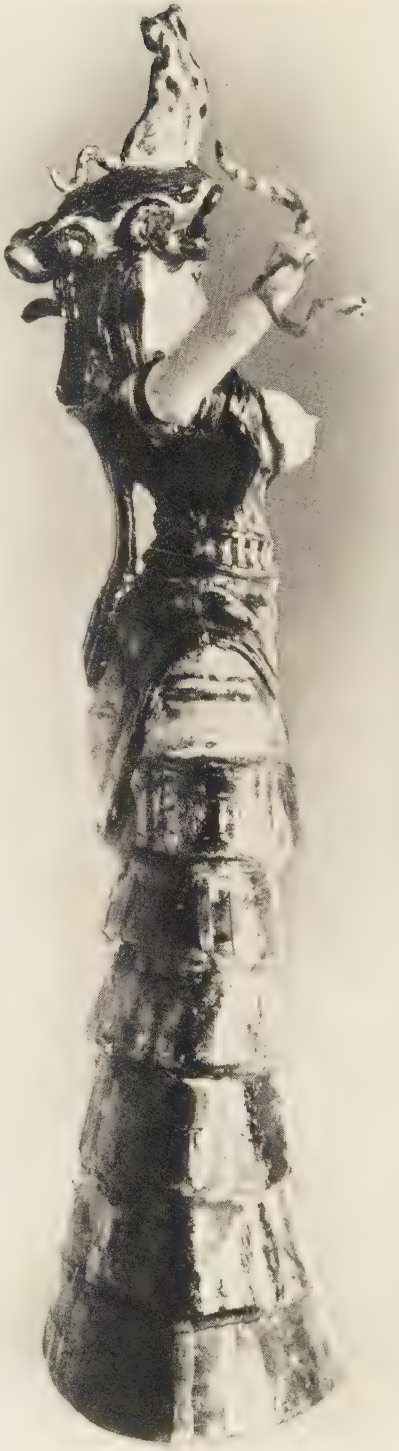

FIG. 306. FAÏENCE FIGURINE OF SNAKE GODDESS, OR OF MINISTRANT IN HER GUISE. TEMPLE REPOSITORY, KNOSSOS ($\frac{5}{8}$).

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[1] See Prof. E. A. Gardner's remarks in *Ancient Egypt*, 1915, Pt. II, p. 50, and cf. L. D. Caskey, *Am. Journ. of Arch.*, xix (1915), p. 240. Prof. Gardner observes 'that the head recalls rather the sculptures of Rheims and Bamberg, but it looks more modern'.

[2] See below, p. 454 seqq.

to light what it is impossible not to regard as a companion piece to the Goddess, the ivory figurine, namely, of a boy-God, also distinguished by a tiara, of practically the same height, and with a head and face that at once provoke modern comparisons (Fig. 309). It seems probable indeed that this had fallen to the share of a partner in a group of stolen ivories belonging to the same deposit, but that it had been 'released' after a somewhat longer interval—a not infrequent occurrence in such cases.

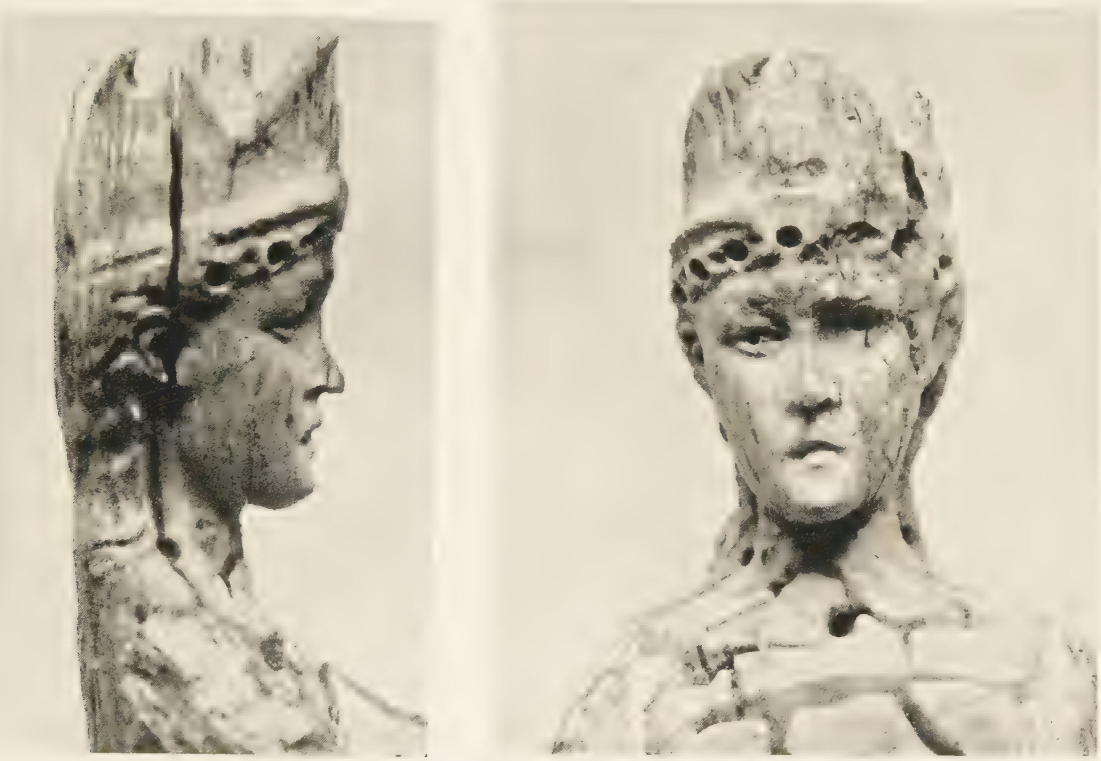
a *b*

Fig. 307. *a*, *b*, Head of 'Boston Goddess', showing Holes to attach Curls of Gold Wire. $(\frac{3}{1})$

Probably from same Knossian source as Goddess.

The figurine migrated to Paris a few years after the War where it made its appearance amongst a series of objects said to have been discovered by a Cretan miller. But the boy was in bad company. Of the numerous associated objects—all said to be Minoan and to have been found at the same spot—it was hard to recognize any genuine relic beyond one or two fragments. The whole lot seemed to have been the result of a peaceful and 'sheltered' industry, carried out during that stormy time. The output was in

Fragments of steatite cups with male heads in relief found with ivory.

part of a highly expert nature, but tempered with the usual ignorance that dogs the forger's footsteps. In addition to a series of gold rings—on one of which the Minotaur figured under his later aspect with a human body—the bulk of the objects were steatite vessels with reliefs, one of these a pedestalled cup clearly based on that from Hagia Triada depicting the 'Young Prince'. It must be said that the artist seems to have had convenient access to the Museum at Candia. Fragments, however, of two small heads in relief belonging to similar vessels which were said to have been actually associated with the ivory figure, belong unquestionably to the finest transitional style of that class (Fig. 308, *a*, *b*).

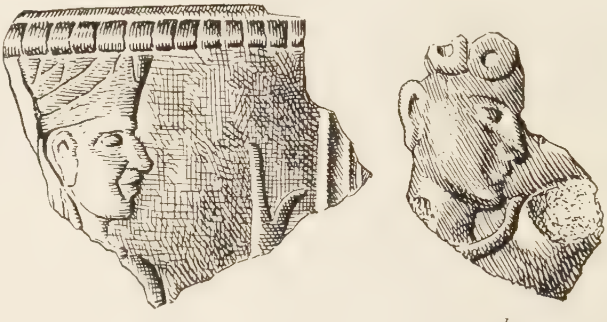

Fig. 308. *a*, *b*, Fragments of Dark Steatite Cup with Reliefs, said to have been found with Figurine of Boy-God.

One of these (*a*) wearing a head-piece or tiara of unusual character holds up his hand as if in the act of adoration or salutation apparently in front of a shrine. The other is clearly engaged in some athletic contest.

Ivory figure of boy-God as found.

As will be seen from the views of the ivory statuette itself in the condition in which it emerged, the main part of the figure was preserved in one piece,—a very different fate from that of the Goddess! The chief damage that it had suffered was the disintegration of the front part of the two thighs from the groin to the knees, and the missing material here has been successfully filled in, for the better conservation of the whole, with a mixture of wax and paraffin.[1] Of the arms, one was entirely wanting, but the greater part of the right arm was preserved, as shown in Fig. 309. They were originally in separate pieces, the sockets for the insertion of the tenons of which are visible on each side of the figure.

Belt already fitted to child's body.

Though the artist's intention was clearly to represent a child not more than about ten years of age, we see the Minoan belt already fitted to the small body and, indeed, must suppose, from the disproportionate width of the thighs as compared with the waist, that it had already begun to adapt itself to the forcible constriction of the internal organs imposed by the narrow, apparently metal ring.

That no attempt was made to girdle in this way quite young boys of

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[1] This was skilfully executed for me by Mr. W. H. Young, the *formatore* of the Ashmolean Museum.

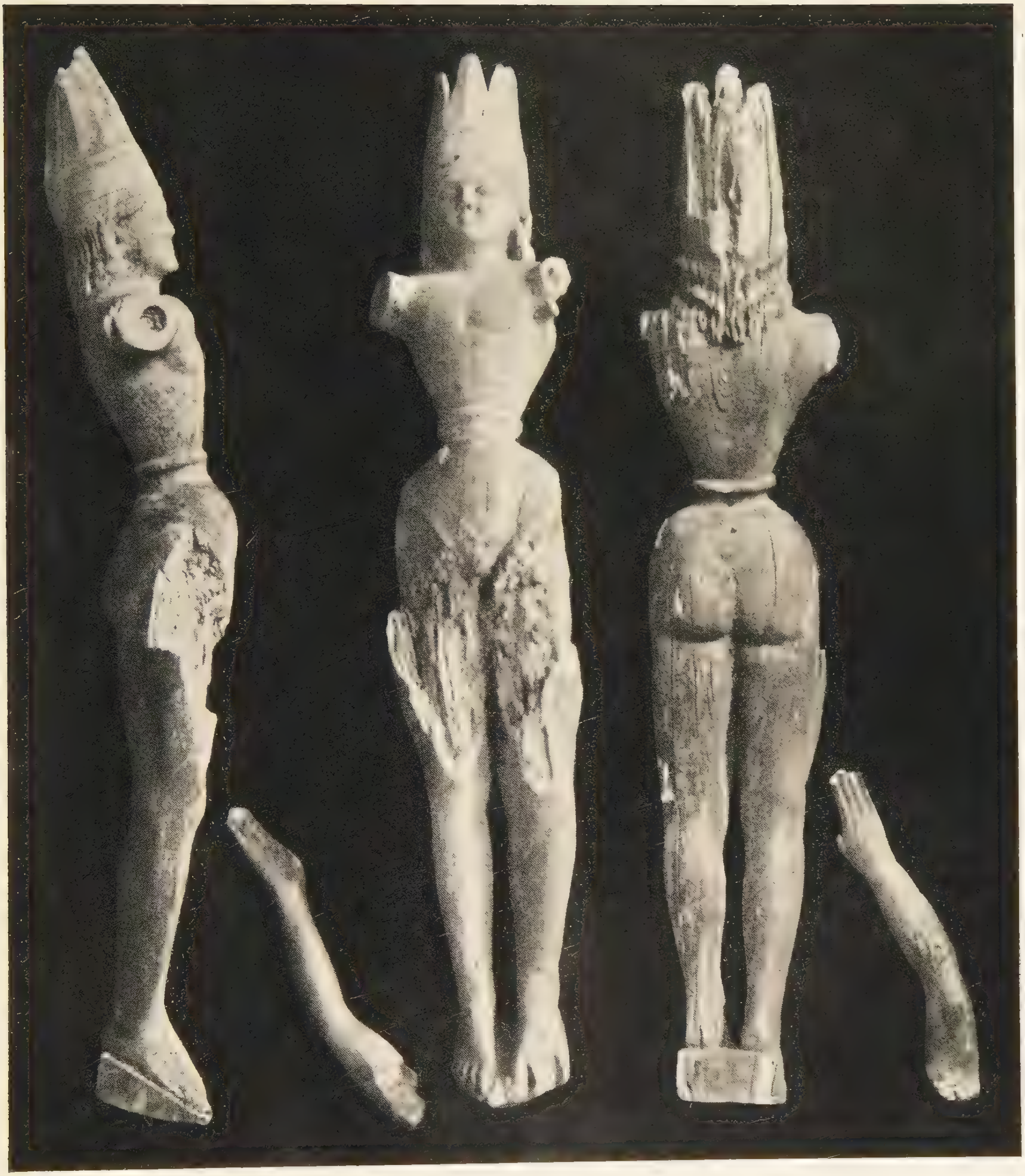

Fig. 309. Figurine of the Ivory Boy-God, showing the Condition in which it was found: with the Right Forearm detached. (slightly reduced.)

Very young infants beltless: Palaikastro ivories.

four or five years old is shown by the small ivory statuettes in a standing or a squatting position found at Palaikastro,[1] the former of which are reproduced from photographic copies in Suppl. Pl. XXXVII, B, and from a sketch in Fig. 310. The standing type here seen, with the arms by the sides, approaches some Middle Kingdom Egyptian prototypes,[1] and the markedly dolichocephalic form of the heads also points in that direction. The little squatting figure, which is of very graceful execution, recalls that of the boy engaged in some pavement game on the Miniature Fresco fragment illustrated above in the Coloured Plate XXV. There seems every reason to believe that the squatting attitude was an old tradition of Minoan Art.[2] In a more conventional form the squatting type of naked infant is in fact already seen in a small stalagmite pendant from Messarà, belonging to the mature Early Minoan phase (Fig. 311, *a–c*).[3] In this case the hands are laid on the knees.

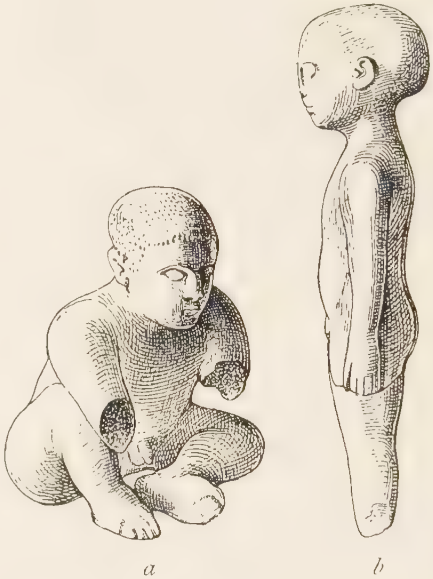

FIG. 310. *a*, *b*, IVORY FIGURES OF YOUNG BOYS: FROM PALAIKASTRO ($\frac{2}{3}$).

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[1] R. M. Dawkins, *Unpublished Objects from the Palaikastro Excavations* (*B. S. A.*, Suppl. Paper I, 1923, pp. 125, 126). From their associations Professor Dawkins was led to the conclusion that these ivories 'are not likely to be earlier than L. M. II'. The photograph was kindly supplied me by Prof. Dawkins. The sketch (Fig. 310, *a*, *b*) is reproduced, by permission, from *B. S. A.*, Suppl. Paper I, 1923, p. 125, Fig. 107.

[2] Dr. H. R. Hall, in his *Civilization of Greece in the Bronze Age* (1927), p. 273 note, refers to these ivory boys as 'probably Egyptian', and as such they have been included in Mr. J. D. S. Pendlebury's extremely useful work *Aegyptiaca: a Catalogue of Egyptian Objects in the Aegean Area*: with a foreword by H. R. Hall, Cambridge University Press, 1930 (p. 32 and Pl. III, 52, 53). With all deference to the opinion expressed above, and, while agreeing with the view that a strong Egyptian influence has been here operative, I would still claim these works as Minoan. 1. The baldness of the heads is here corrected by dots signifying hairs. 2. The wooden standing figures of Middle Empire date that seem to be prototypes of *b* have the left leg slightly advanced. 3. The Egyptian squatting type shows the right forearm not resting on the ground but raised to the face with the hand on the lips—the ideograph for a child; taken over by Harpokrates. 4. The figure finds a Minoan parallel. 5. The boy's face is hardly Egyptian. Add to this that a separate child's head of ivory was found with a tenon to attach it to the body—a Minoan device.

[3] Doubtless derived from an early *tholos*. It presents a resemblance to certain ivory pendants

Rivet-holes in ivory figure for gold-plated belt and kilt.

In the case of the boy-God—as in these still more infantile figures—there are indications of the sexual organs, and obviously the 'Minoan sheath' was not worn by him. That his belt was covered by a gold plate may be inferred from a pin-hole for the attachment of a small rivet, seen on its posterior section, and it seems possible that his loins were also covered by some kind of short kilt, since rivet-holes of the same kind appear above either hip and, again, just below the middle of the belt behind. But there is no evidence of a band having been drawn up between the legs.

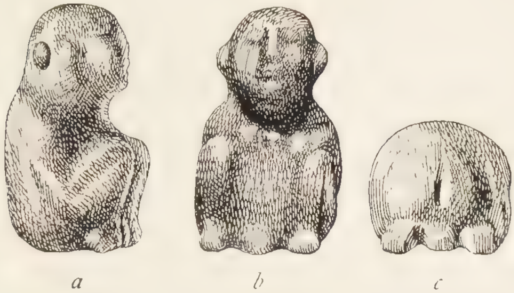

FIG. 311. *a, b, c*, STALAGMITE FIGURE OF SQUATTING BOY FROM MESSARÀ. EARLY MINOAN.

Belts on young girls.

That the waists of little girls of about the same age were also confined by the tight girdle is well shown by a series of intaglio types, to the significance of which attention has been already called in this work,[1] representing two little handmaidens of the Goddess, who was thus attended by *Διάσκουραι* anticipating the *Κοῦροι* of the later Zeus of Crete. These are depicted, except for their stature, like grown-up women, with flounced skirts bulging out from their tight girdles in a bell-shaped outline in a manner almost suggestive of the little Infanta of Velasquez. Such are well seen on the celebrated signet from the Mycenae Treasure, perched on convenient hillocks the better to offer flowers to the Goddess and to pluck fruit for her from the sacred tree.

Proportions of figure of boy-God.

The girth of the belt round the boy-God's waist is about 28 millimetres; its width 10, and from front to back, 8. Round his chest, beneath the armpits, the girth is 72 millimetres, the breadth here being about 25 mm. or two and a half times the width of the waist. The greatest width of the hips is 31 millimetres.[2] The face from the chin to the top of the head is about 18 millimetres and the head was of about the same length. In a normal male body the breadth of the waist should be somewhat over the height of the head,[3] so that in this case it has only half its natural proportions.

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in the form of squatting apes, e. g. *P. of M.*, i, p. 118, Fig. 87, 1 *a*, 1 *b*; Xanthudides, *Vaulted Tombs of Messarà*, Pl. XIII, 1040, but in this case the fore paws rest on the ground.

[1] See especially *P. of M.*, ii, Pt. I, pp. 340–2. The recurrence of the triple group of the Goddess and her two girl attendants was first pointed out in my *Ring of Nestor, &c.*, p. 12 seqq. (*J. H. S.*, xlv (1925), and Figs. 11–15).

[2] The girth at the hips is 80 mm.—as usual in the case of Minoan male figures, somewhat greater than that taken under the armpits.

[3] See Prof. Arthur Thomson, *Handbook of Anatomy for Art Students*, p. 389.

Sections are shown in Fig. 312 of the body of the figure round the chest (A), the waist (B), and the buttocks (C).

Comparative proportions of girth of adult male figure.

Taking the actual height of the image from the heels (the upper part of the tiara being omitted) as about 13 centimetres, the width of the waist is $\frac{1}{13}$ of the whole. In the case of the bronze figure of an adult man reproduced in Fig. 320 below, the original height of which was approximately 25 centimetres, the width of the girdle[1] is slightly under a twelfth, a comparison that leads to a very interesting result.

If we may imagine the boy-God represented by the ivory statuette to have reached maturity, the 13 centimetres of his stature as here seen, might with sufficient accuracy be increased to 16. If he then still wore a belt of the same size its proportion to his whole height would work out at just under a twelfth, in other words, it would show an exact proportional correspondence with the case illustrated by the bronze adult figure above referred to.

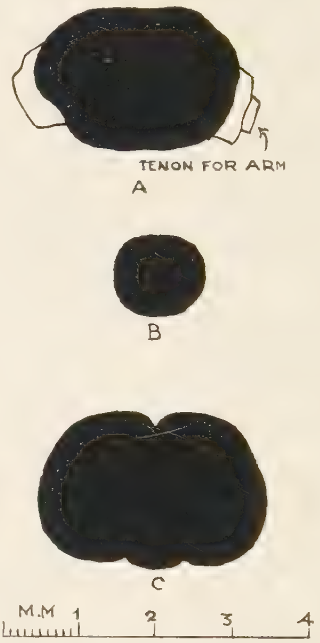

Fig. 312. Sections of Ivory Figurine of Boy-God: A, round Chest; B, Waist; C, round Buttocks.

Is it possible then that, while children of both sexes were still of very tender years, metal belts were riveted round them, to which their growing bodies adapted themselves and which remained a permanency for at least the greater part of their life?

Adaptation of human body to early waist constriction.

Considering the vital ducts and vessels involved by the constriction below the ribs, this might have been thought an impossible interference with Nature. So far, however, as it has been possible to consult expert medical and physiological opinion, this result could be achieved without patent injury to the health of the subject.[2]

Such representations of the encircling ring that we possess leave a very clear impression that it was of metal.[3] That in individual cases it may have been renewed or re-riveted is probable enough, and it looks as if in some cases padding had been introduced. But the main fact with which we have to deal is that this constricting belt, or another of approximately the same dimensions, continued to be worn in years of maturity.

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[1] The height of the head in this case is 30 mm., so that normally the width of the waist should have been 45 mm.—that is, about a fifth of the height of the figure.

[2] Amongst other authorities who have kindly given me their opinion on this question, and who take this view, are Lord Moynihan, President of the Royal College of Surgeons, and Sir Humphry Rolleston, Regius Professor of Medicine at Cambridge.

[3] See, too, on this, J. L. Myres, *B. S. A.*, ix, pp. 364, 365. The more elaborate and apparently claspless belts of the Knossian Cupbearer and other large representations

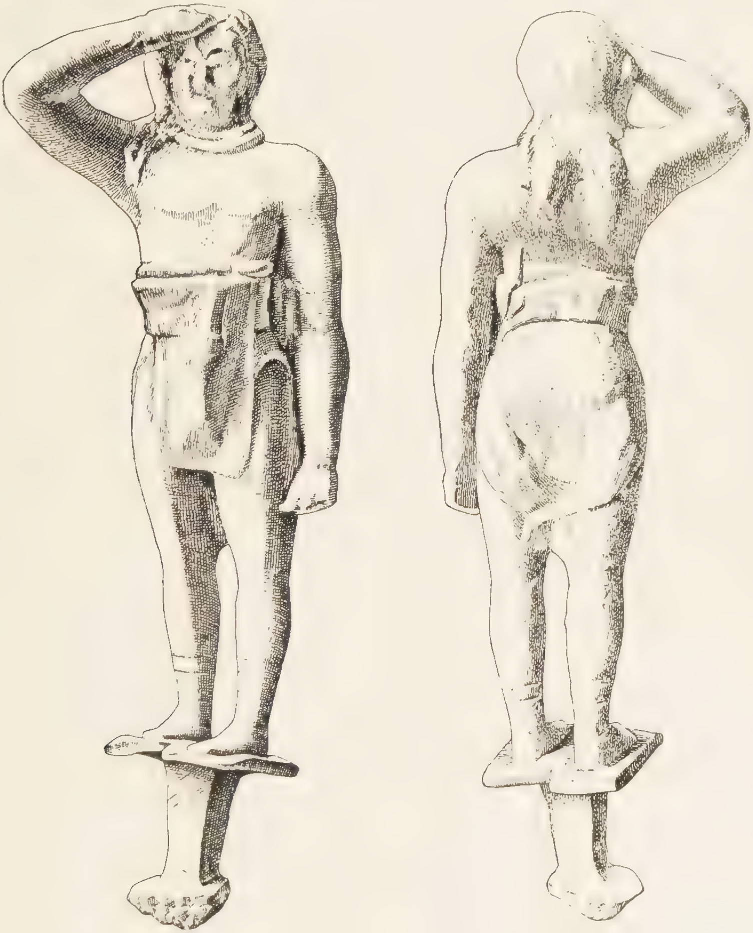

Fig. 313. Bronze Votive Figure of Elderly Man from Tylissos.

Looser belts worn by elderly men.

It does seem, however, that, as a concession to the broadness and obesity often inherent in later years, the wearer might eventually be relieved, and a less tightly fitting belt, probably of leather, be substituted. Such we recognize, for instance, as worn by the old sistrum-player of the 'Harvesters' rout on the steatite 'rhyton' from Hagia Triada,[1] and in the case of a bronze figure of

betray in their outline the essentials of their structure. He gives a diagram showing the concave profile of the belt 'which from its colour and thin edges seems to have been a smooth plate of metal. Its out-turned edges prevent it from chafing the body of the wearer, and this end is further secured by the torus mouldings which seem from their form to represent a padded cushion-like belt of some elastic material.' He suggests the possibility of there having been a metal belt with smooth ends which would slide over one another as pressure was applied by means of 'a tightly drawn lace or thong'. It seems, however, to be more probable that the metal part of the belt formed a solid ring riveted so as to form one piece.

[1] See the excerpt from it given in *P. of M.*, ii, Pt. I, p. 47, Fig. 22, *b*.

man of broad and bulky proportions from Tylissos, reproduced in Fig. 313.[1] A similar loose belt surrounds the waist of a man of heavy build represented by a Minoan bronze figurine in the British Museum[2] (Suppl. Pl. XXXIX).

This was, in fact, only a return to the older fashion so well illustrated by the terra-cotta votive figurines from Petsofà.[3] These and other parallel examples belong to the earlier phase, *a*, of M. M. I, and may date, therefore, from the last century of the Third Millennium B.C. The fashionable woman's dress of the time was a cloak with a high peak behind[4] and tied by a cord round the waist like a modern dressing-gown, and this remained in vogue till the closing phase of M. M. II.[5] So far, at least, as women's dress is concerned the new fashion with the pinched waists must have grown up during the succeeding M. M. III period—from the Seventeenth Century B.C. onwards—and may be thought to be a reaction of the male custom of wearing a narrow belt, with which it makes its appearance *pari passu.* With the men it seems to have been adopted rather as a sign of strength and endurance, such as would have been implied by the close girding of the loins, than from any aesthetic considerations. It stands, indeed, in a very near relation to the national sport. It is certainly a suggestive fact, in view of the Oriental origin of the bull-grappling shows themselves, that Gilgames in his struggles with the man-bull Eabani early appears on cylinders with what seems to be a close-fitting belt of metal.[6]

Tight waists begin with M.M.III.

To start the desired remoulding of the human frame in early childhood is in itself usual in such attempts to improve on Nature. It may, indeed, in this respect be set beside the Chinese practice of checking the growth of women's feet from earliest infancy, or the binding of boards to their babies' heads by the Indian 'Flat-heads'. At the same time the prominence thus given to the thighs and the relative breadth added to the expansion of the chest may in the case of the Minoan usage have flattered certain personal vanities. It is really only another form of the tight-lacing that has at recurring epochs marked the fashions of modern Europe, though

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[1] J. Hatzidakis, Τύλισσος Μινωική.

[2] Published by F. N. Pryce, *J. H. S.*, xli (1921), p. 86 seqq., and Pl. I.

[3] J. L. Myres, *The Sanctuary Site of Petsofà* (*B. S. A.*, p. 356 seqq.: cf., especially, Pl. X. See, too, *P. of M.*, i, p. 152, Fig. 111). The 'Minoan sheath' was attached to this and a dirk slung across it. The belt was often broad, and there was no sign of constriction.

[4] On this costume, and on its 'proto-Libyan' affinities, see *P. of M.*, ii, Pt. I, pp. 32, 33, and Figs. 14, 15.

[5] Witness the 'hieroglyphic' signet-type, *op. cit.*, p. 33, Fig. 15.

[6] See, for instance, the representations of the struggle on cylinders.

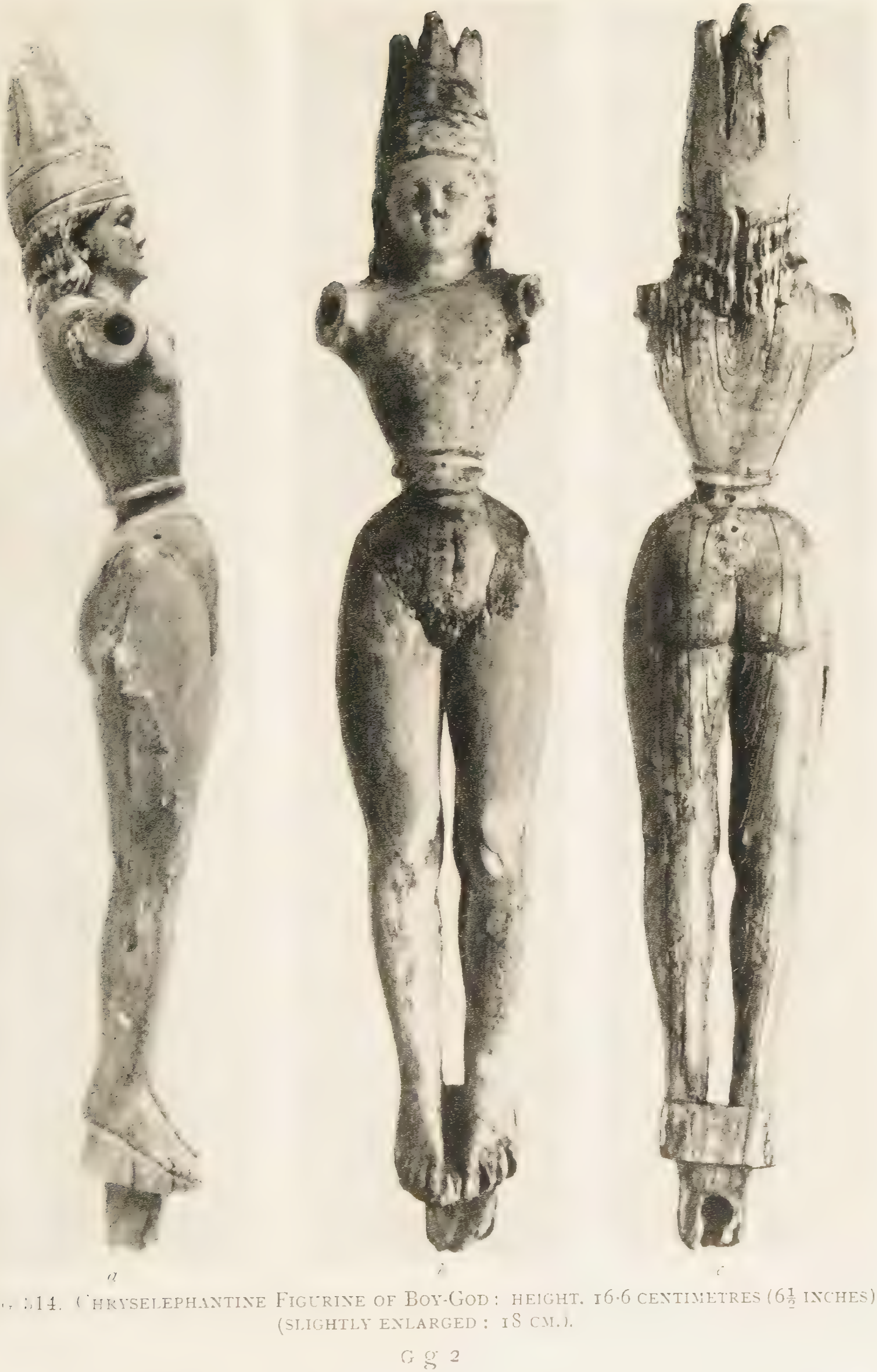

FIG. 314. CHRYSELEPHANTINE FIGURINE OF BOY-GOD: HEIGHT, 16·6 CENTIMETRES (6½ INCHES) (SLIGHTLY ENLARGED: 18 CM.).

these did not give the human trunk the opportunity for gradual adaptation from childhood upwards supplied by the Minoans.

Attitude of boy-God on tiptoes and adorant.

Views of the ivory figurine in three positions are given in Fig. 314, enlarged by about one-twelfth. The artist here, working on such a favourable material, had the further advantage that he had to deal with the pure human form and was not, as in the case of a female statuette like the Goddess above illustrated, for the most part concerned with the fashionable attire that concealed it. Flounces and embroidered aprons did not here stand in his way, and, though the belt was doubtless gold-plated and a slight covering of gold foil may have overlaid the upper part of the thighs, as indicated by the pin-holes, this would have closely followed the bodily contours.

The attitude of the Divine Child,—who, for a reason presently to be explained, raises himself on his toes—reflects the graceful Minoan pose already well illustrated by the faïence figure reproduced above in Fig. 306, the upper part of the body being thrown back in this case sufficiently somewhat to uplift the profile of the face, as if the figure were looking towards another of slightly higher stature. The tiptoe arrangement fits in with this, and, in order to make it secure, the foot itself is set on a sloping ledge which raises the heel 10 millimetres above the level of the toes—adding this amount to the stature of the figure. Something too is gained by the tiara, which is 25 millimetres in height as compared with 10 in the case of the ivory Goddess.

The sloping base of the statuette is supported by a smaller quadrangular projection, which, as is seen in the back view given in Fig. 314, *c*, has a circular hole about 4 millimetres in diameter for the insertion of some kind of locking-pin fixing it still more securely to its framework.

Delicate execution of toes: foot of M. M. II *a* figurine compared.

The carving of the toes, the articulation of which is slightly arched in some cases, shows great delicacy (see Fig. 316, *c*). The feet of the leaping youths of the 'Ivory Deposit' omit this feature, since, as was usual in the sports of the bull-ring, they were shod in mocassin-like gear. That already by the early phase of M. M. II the Minoan coroplasts had arrived at considerable proficiency in moulding the toes is, however, shown by a fragment of a painted terra-cotta figurine of a votive class found in a M. M. II *a* deposit that was brought to light by a test-pit sunk by me, years since, near the Amphitheatre of Roman Knossos. It is itself of so remarkable a character that an illustration of it is here given in Fig. 315, *a*, *b*, *c*. The foot is coloured black,—so that we have no indication of the sex,—on a buff-faced base with dark bands, and to the right of it is a raised curving object that may represent some appendage of the dress. On the lower part of the stand is irregular black decoration fringed with a kind of lilac border, painted on the pale buff ground—a characteristic feature of fine egg-shell pottery of the mature M. M. II *a* class.[1] The height of the figurine to which this unique fragment belongs could not have been less than 40 centimetres (*c.* 16 inches). It seems to have been hollow internally and anticipates in its fabric Greek votive figurines executed some twelve centuries later.

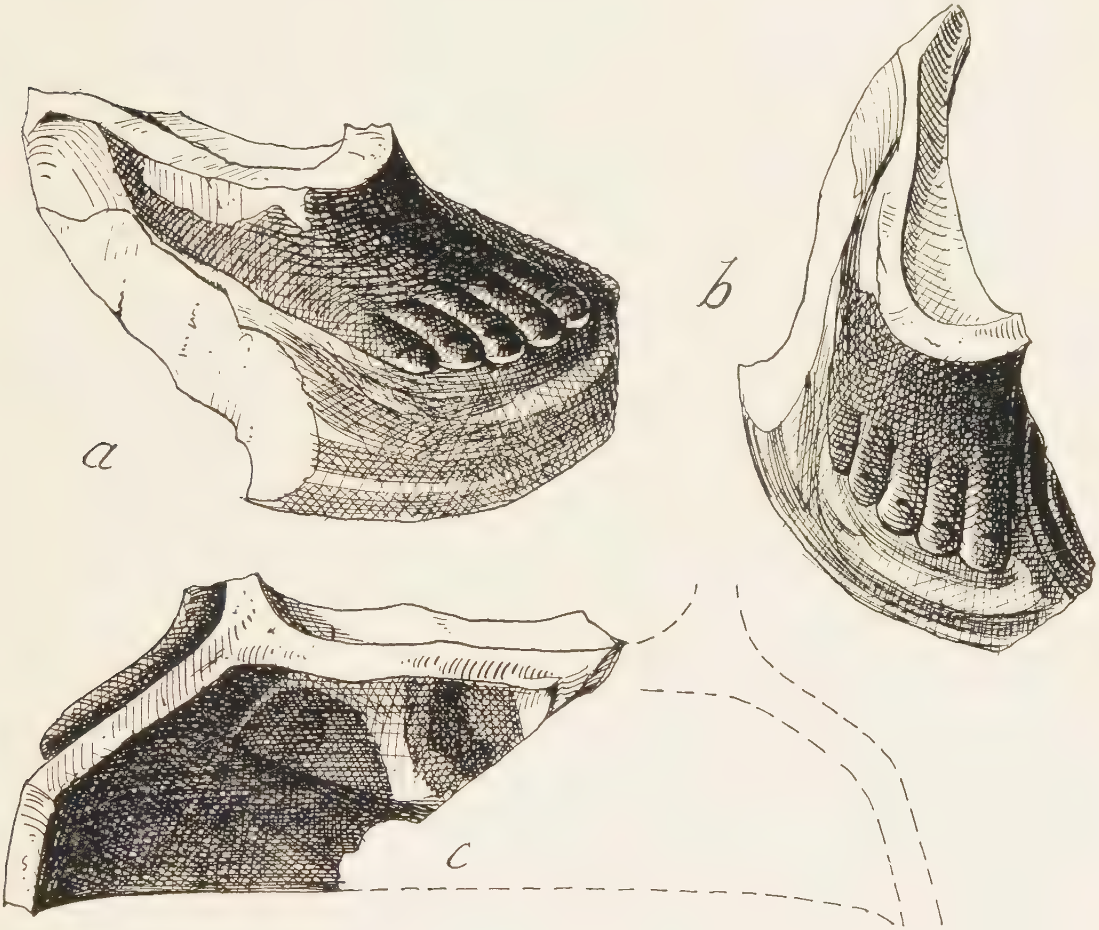

Fig. 315. *a*, *b*, *c*, Foot and Lower Part of Stand of Painted Terra-cotta Figurine. M. M. II *a* Deposit, Knossos ($\frac{1}{1}$).

Carefully, however, as the foot is here executed, the arrangement of the toes is stiff and regular, and we are still far behind the lively naturalistic perception visible in the execution of those of this boyish figure. There the beauty of the feet as a whole transports us rather to Renascence times.

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[1] See D. Mackenzie, *The Middle Minoan Pottery of Knossos* (*J. H. S.*, xxvi, pp. 254, 255, and Pl. VIII: especially Figs. 2 and 18).

Even more modern is the feeling that has inspired the long waving locks that fall so gracefully from the Divine Child's head and hang down over the shoulders and the upper part of his back (Fig. 316, *b*). The face itself, compared with the mature features of the ivory Goddess, shows less expression, as is natural to his tender years. The nose is decidedly snubby and broad, and the eyelids here, though adumbrated, indeed—as appears in certain lights—are not well defined as in the face of the 'Boston Goddess'.

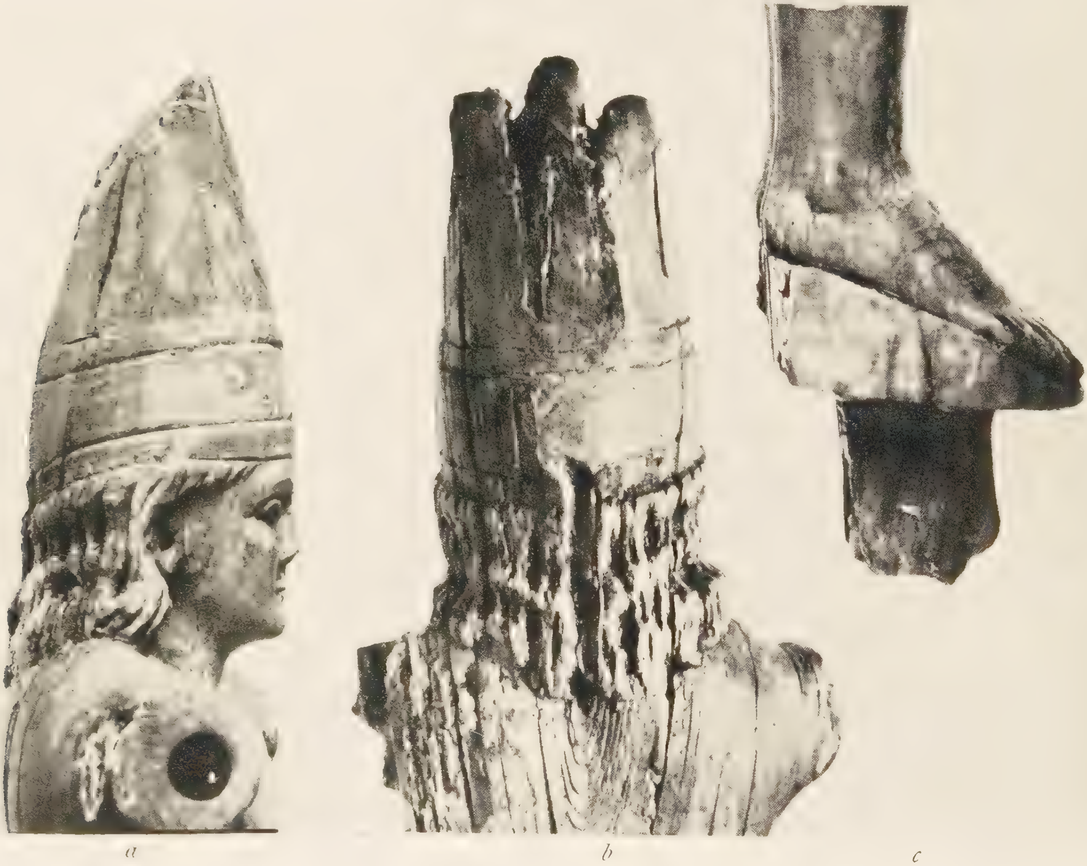

FIG. 316. *a*, *b*, ENLARGED VIEWS OF UPPER PART OF IVORY FIGURE OF BOY-GOD; *c*, HIS FOOT, ON SLOPING STAND ($\frac{7}{3}$).

Waving hair and features of boy-God.

All the same, when the two heads of the Goddess and of the boy-God, as shown in Figs. 307 and 316, are compared, it is impossible not to be struck by a great similarity in style. The modernness of treatment is shared by both, and the mere fact that what we have before us in the latter case is just the head of a young child only confirms the impression. Unfortunately the back of the head and shoulders of the Boston statuette have suffered a great deal of abrasion, but enough remains to show that the locks fell down behind in wavy tresses comparable with those that contribute such a graceful feature to the boy's head[1] (Fig. 316, *a*, *b*).

Modern expression resembles 'Boston Goddess'.

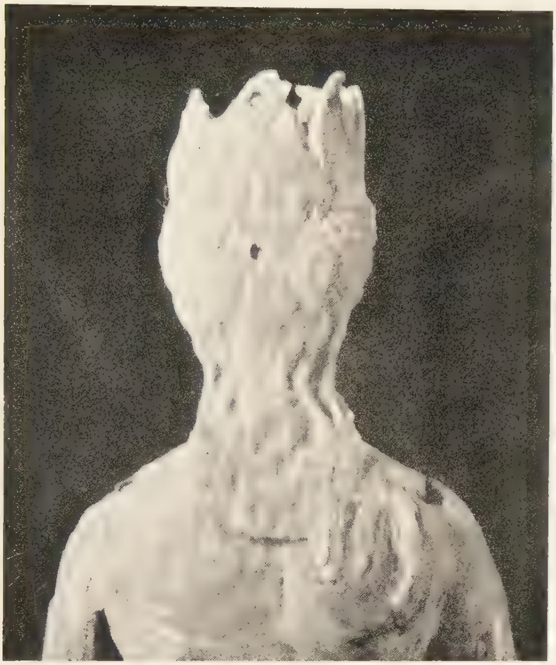
FIG. 317. BACK VIEW OF UPPER PART OF 'BOSTON GODDESS', SHOWING WAVY TRESSES. ENLARGED.

Can it be doubted that both works are by the same artist?

Both figures were chryselephantine, both are crowned by tiaras, and, so far as the arms are concerned, both are of the same composite kind. To this may be added the fact that the history of both points to the neighbourhood of Candia as their source.

By same hand. Knossian source indicated in both cases.

The conclusion seems more and more to impose itself that both the 'Boston Goddess' and the boy-God formed part of the same ivory treasure —connected with a Palace Shrine of Knossos—as that to which the 'leaping youths' and other associated remains belong. All are of approximately the same date, the closing M. M. III phase, when Art was at its highest level.

But the connexion between the Goddess and the Divine Child seems to be even more intimate. It is a highly suggestive circumstance that the height 166 millimetres or exactly 6½ inches corresponds, within a small fraction, to that of the 'Boston Goddess'.[2] This remarkable agreement, indeed, best explains itself if we regard them as having been contained in the same frame and as forming part of the same group. They are thus reproduced in the sketch, Fig. 318, executed for me by Monsieur Gilliéron, fils.

Correspondence of height of the two figures.

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[1] The more or less horizontal *ondulation* of the hair of 'proto-Libyan' ivory figures (*P. of M.*, ii, Pt. I, pp. 24, 25, and Fig. 9, *c*, *d*, *f* 1, *g*) is more artificial. In the Minoan case art conceals art.

[2] This, as restored, is given as 161 mm. or about 6½ inches. More minute accuracy is possible in the case of the boy-God.

Both belong to same pair:

What, indeed, can be more beautiful and natural than the relationship which the attitude of the boy-God itself suggests? Standing on tiptoe with his face slightly upturned he has the appearance of actually gazing at the slightly higher figure, and the obvious restoration of the right arm as lifted to the level of the peak of his tiara, shown in Fig. 318, is only needed to supply the act of salutation. It is the Divine Child adoring the Mother Goddess.

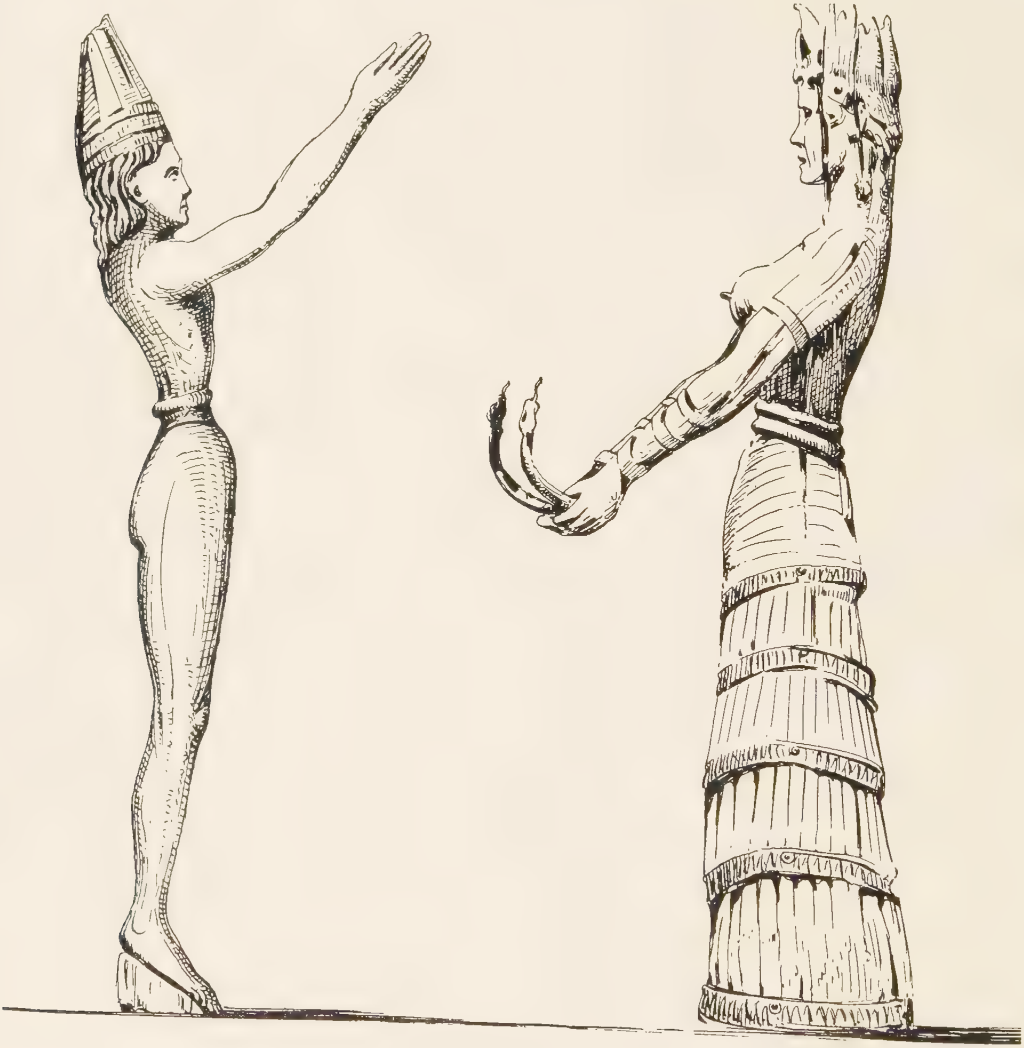

FIG. 318. GROUP OF BOY-GOD ADORING GODDESS (RESTORED DRAWING BY MONSIEUR E. GILLIÉRON, FILS).

Child God adoring Mother Goddess.

The relation of this youthful male to the mature female figure, the divinity of both of which is here marked by the elaborate tiaras, brings us face to face with the most interesting and, in some respects, the most difficult problem in Minoan Religion.

Matriarchal stamp of Minoan Religion.

It is certain that, however much the male element had asserted itself in the domain of government by the great days of Minoan Civilization, the Religion still continued to reflect the older matriarchal stage of social development. Clearly, the Goddess was supreme, whether we are to regard her as substantially one being of varied aspects, celestial, terrestrial, or infernal, or whether we have to deal with separate,[1] or partly differentiated divine entities. As a working hypothesis the former view has been here preferred, and it has been assumed that the same Great Goddess is represented. In the one case doves may alight on her from the sky above, or in the other she may grasp the encircling snakes that mark her as Mistress of the Nether World; at times she bears the Sacred Double Axe that was the special emblem of Minoan Cult; or she may hold out a primitive anchor[2] as Mistress of the Sea. Or, again, she appears with the sword of temporal dominion in one hand and the *aspergillum* of purificatory sprinkling in the other symbolizing her spiritual power. In one case her sacred animals may be exotic lions, in another the Cretan wild goat, while at other times she hunts the stag like Artemis or, like her, again, holds wild-fowl by their necks.

Various attributes of Goddess.

But in the main one and same.

That one or other of these shapes may have been specialized enough to rank as a separate divinity is quite possible, but it might still be regarded as the Great Goddess under some particular physical or local aspect. The Semitic Astarte—like Baal—had the same multiplicity of symbols in different places,[3] yet the Dove Goddess of Ascalon is essentially the same as the Cow Goddess of Sidon, and other varieties of attributes such as the fish, the ram, or, at Carthage, the horse, do not change her fundamental character. Elsewhere[4] I have brought into comparison the variant attributes of local Madonnas, who, indeed, incorporate the elements of more than one divinity as judged from the Classical standard. But it is dangerously misleading to regard the Minoan Goddess from the standpoint of Greek and Roman Religion.[5] What is certain is that in the cult-places of the divinity attributes such as the dove, the serpent, and the Double Axes are apt to recur together, while the same companions are found with the Goddess in her various aspects. It is essentially the same divinity.

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[1] Professor Martin P. Nilsson, in *The Minoan-Mycenaean Religion and its Survival in Greek Religion*, prefers this view.

[2] See *P. of M.*, ii, Pt. I, pp. 248, 249.

[3] See, especially, W. Robertson Smith, *Lectures on the Religion of the Semites*, p. 477.

[4] *P. of M.*, ii, Pt. I, p. 277, and cf. pp. 251, 252.

[5] This criticism applies in part to the attitude adopted by Prof. Nilsson in his valuable work on the *Minoan-Mycenaean Religion and its Survival in Greek Religion* (Lund, 1927).

Female companions: the *Διάσκουραι.*

It is observable, moreover, that the most intimate associations of this divinity are reserved for members of her own sex. A female companion, more or less of the same age, is often coupled with her, sometimes simply in a conversational relation, as on the 'Ring of Nestor',[1] sometimes holding out to her a vessel with drink offering,[2] or, as in other designs, the poppy capsules, so appropriate to an Earth Goddess.[3] This particular attribute, indeed, appears in her hand on the very important bead-seal from a Thisbê tomb in which she rises from the Earth like Gaia. She is helped in this case by an attendant—in a courtly fashion quite in keeping with the Minoan atmosphere. Sprouting shoots of vegetation, like nursling palms, appear on either side (Fig. 319). This, surely, is the same Goddess who sits beneath the fruit-tree on the gold signet from Mycenae, holding the same poppy capsules.

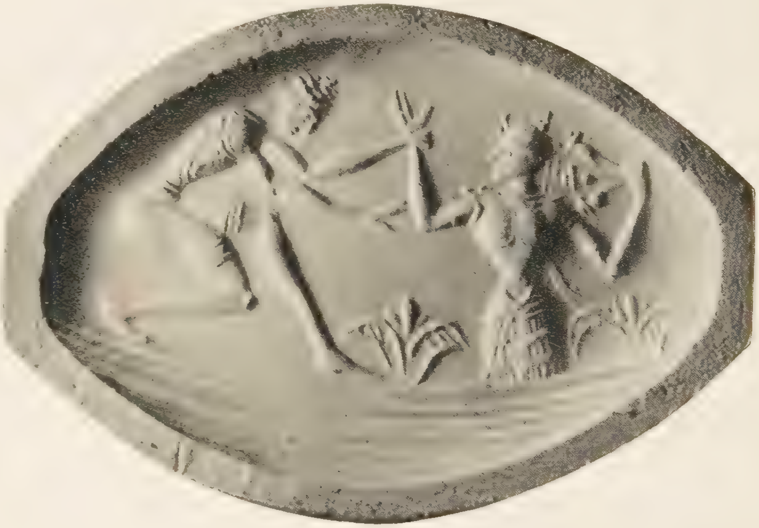

FIG. 319. INTAGLIO ON GOLD BEAD-SEAL FROM THISBÊ SHOWING MINOAN GODDESS HELPED TO RISE FROM THE EARTH BY YOUNG MALE ATTENDANT. ($\frac{3}{1}$)

A young male attendant.

On that signet the two little handmaidens appear who link this religious group with a series of others in which the Goddess makes her appearance, while the Double Axe above and the lions' masks behind supply yet further connexions with the divinity of the central sanctuary at Knossos.

The two girl attendants, who, as has been already shown, attend the Goddess in a series of such religious scenes—anticipating, in some sort, the later *Κοῦροι*—again emphasize the female character of the cult.

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[1] *P. of M.*, ii, Pt. II, p. 482, Fig. 289, and above, p. 153.

[2] E. g. *P. of M.*, ii, Pt. II, pp. 767, 768, Figs. 498–500.

[3] E. g. on a gold signet-ring from Thisbê (*ibid.*, Pt. I, p. 341, Fig. 194, *d*), the Goddess, holding the poppy capsules and attended by her small handmaidens, is seated opposite another seated figure of her own sex and size (*Ring of Nestor*, p. 11, Fig. 11: Macmillans, 1925).

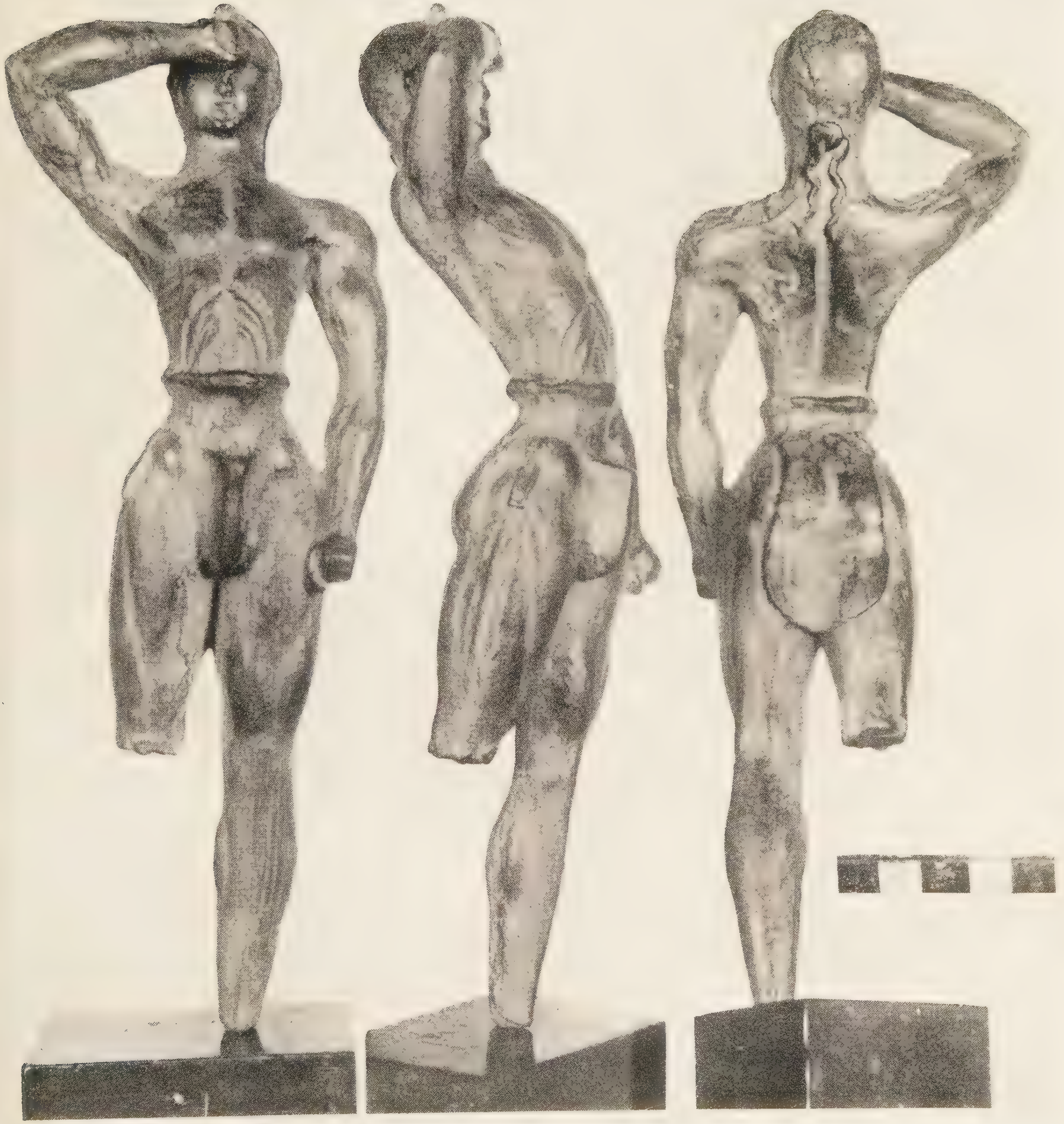

FIG. 320. BRONZE FIGURE OF YOUTHFUL MALE ADORANT: HEIGHT *c.* 25 CM. (SCALE ABOUT $\frac{2}{3}$).

Youthful Male Adorants.

Absence of male consort.

Hitherto, indeed, it has been difficult to recognize anything like a male consort to the Goddess in Minoan religious art, or, indeed, any male equivalents, of the *Κοῦραι* of the Minoan *Δία*. The courtly attendant who in the above signet-type (Fig. 319) helps to raise the Goddess from her underground abode has no claim to be regarded as standing in any such relationship to her. So, too, the numerous bronze figures of youths or men in the attitude of adoration must be naturally looked on as votaries, and when found in sanctuaries may be recognized as their personal *anathemata* in the form of their individual image.

Bronze figure of male adorant.

The finest of all the figures of this kind is one brought years ago to Piraeus from Crete, and recently acquired by the National Museum at Athens, which, thanks to the courtesy of the Director, I am able to reproduce here for the first time in Fig. 320. Its strong forms afford in themselves a useful contrast to the boyish figure described above.

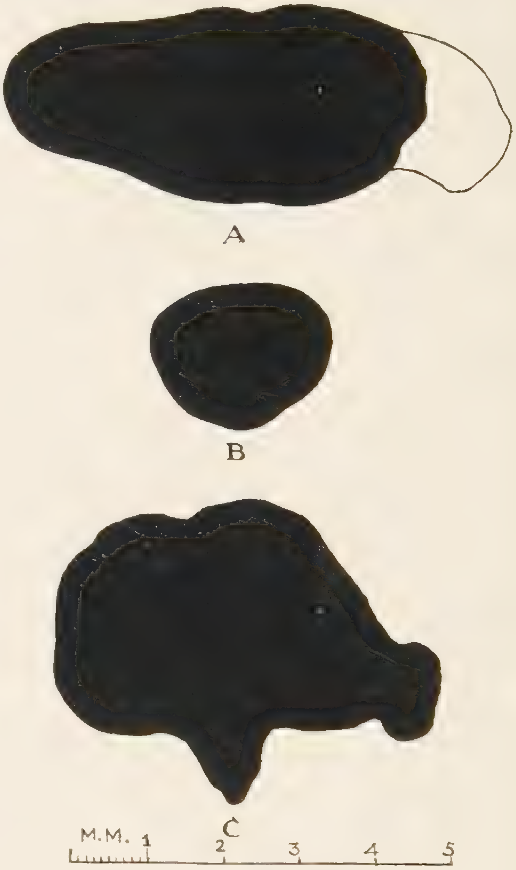

Fig. 321. Sections of Bronze Figurine of Male Adorant: a, across Chest; b, Waist; c, Loins. ($\frac{1}{1}$)

The lower part of the right leg and the left foot are missing, but the figure is otherwise perfect, and the original height was about 25 centimetres, or about 10 inches. The breadth beneath the chest, measured from below the armpits, is 3·2 cm. The girth here was about 10 cm., while near the hips the breadth was 4·3 cm.—the girth round the buttocks being 14·4 centimetres. The girth of the waist following the hollow of the girdle is 7·3 cm. The comparative greater circumference of Minoan male figures at the loins as compared with the chest is a normal feature, and has already been illustrated in the case of the ivory boy-God—but here the disproportion is considerably greater.[1] (See Sections, Fig. 321, a, b, c.)

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[1] In the case of the boy-God the girth at the chest was 7·2 cm., and at the hips 8·0. The circumference of the girdle was there 2·8 cm., rather less in proportion to the girth of the loins—8·2 cm.—than in the case of the bronze figure, where the ratio is approximately two to one.

As is frequently the case with bronze figurines of this class, the hair, which presented exceptional difficulties in the casting, is somewhat summarily rendered by means of two curling locks in front, one of which falls down to the left shoulder, and two behind knotted together above. Otherwise the head has a bald appearance. The loin-clothing with a flap, of the medium size, covering the buttocks, and with no drapery in front,[1] is of a kind usual in the transitional M. M. III–L. M. I epoch. The belt shows the end of a strap hanging down over the right thigh.

Attitude of adoration.

The figure is that of a young man in the full vigour of his years and strength, and with muscles and sinews well developed by athletic exercise. At the same time his ribs are prominently shown. The upper part of the body is thrown back in the characteristic manner, and the upraised left arm rests against the forehead in the attitude of adoration common in figures of this votive kind. Adorant bronzes, sometimes female, of this class are frequent (see Suppl. Pl. XXXIX). Several were found in the Cave Sanctuary of Psychro—one of them remarkable for the long drapery in front,[2] a feature which recurs in the case of another example in the British Museum.[3] This figurine shares with the well-known 'fat man' from Tylissos[4] the peculiarity of wearing a belt of commodious proportions—which shows, as already noted, that elderly men allowed themselves this latitude. Sometimes, as in a figure from Gournià,[5] the right arm is only raised to the level of the breast. In the case of a bronze statuette found near Phaestos and now in the Leiden Museum[6] of a youth wearing a flat brimmed hat, both the forearms are raised with strong muscular action, so that the hands, which are broken off, would have been in front of the face (Fig. 322).

Youth in brimmed hat.

One and all, these bronze figures may be reasonably regarded as intended to be representations of their individual owners in the act of adoration, and as fashioned with the special object of placing themselves under the guardianship of the divinity to whom they were offered.[7] The inscribed clay figure from

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[1] In some bronze votive figurines apparently of a slightly earlier class the drapery is long in front. See *P. of M.*, i, p. 681.

[2] See Suppl. Pl. XXXIX.

[3] Cf. F. N. Pryce, *J. H. S.*, xli (1921), p. 86 seqq., and Pl. I. See Suppl. Pl. XXXIX.

[4] Hatzidakis, Τύλισσος Μινωϊκή. See above, p. 449, Fig. 313.

[5] Hawes, *Gournià*, Pl. XI, B. 21.

[6] Published by Dr. G. Van Hoorn, *Eine minoische Bronze in Leiden* (*Jahrb. d. k. Arch. Inst.*, vol. xxx (1915), p. 65 seqq.). The 'apron' here is double. The subject of the Minoan loin-clothing is there carefully treated by Dr. Van Hoorn. The figure is much oxidized. In its present state, without the lower part of the legs, it is 14 cm. high.

[7] The leaden statuette found by Tsountas in a *tholos* tomb at Kampos is rather that of a pugilist. He wears some kind of quilted headpiece but no weapon, and the attitude of the arms is very characteristic of a

Tylissos,[1] though incomplete, suggests that, like so many Greek *anathemata*, some of the Minoan, too, bore the names of their dedicators. So too on the bronze Votive Tablet of Psychro there appears what seems to be the name of its offerer.[2]

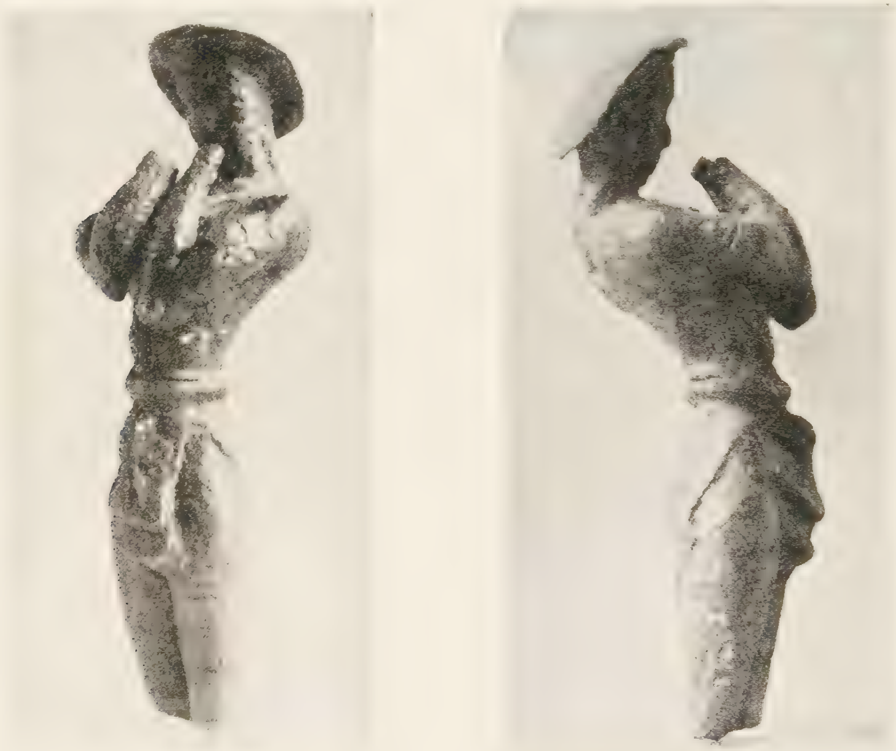

Fig. 322. Votive Bronze Figure of Youth from near Phaestos wearing Broad-brimmed Hat and with both Forearms raised: Leiden Museum. (*c.* $\frac{2}{3}$)

The counterpart to these, which has a special value, since here we see both the adorant and the divinity worshipped, is to be found on a series of gold signet-rings or their clay impressions, of the religious class already described, one feature of which, already detected in the case of reliefs and inlays, is the running together into a single group of what are really separate episodes.

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proficient in the 'noble art of self defence'. This figure, for no sufficient reason, has been recently described as a flute-player: it rather suggests comparisons with contemporary pugilistic scenes on steatite vases and miniature paintings. (For the figure see Εφ. 'Αρχ., 1891, p. 162; Tsountas, Μυκῆναι, p. 182, Pl. XI; Tsountas and Manatt, *Myc. Age*, pp. 229, 230, Pl. XVII; Perrot and Chipiez, vi, pp. 733, 759, Fig. 355, &c.) Like the female figure found with it, this may yet very well have been of the votive class, since the Minoan chamber tomb could be also a shrine of the Goddess

[1] *P. of M.*, i, p. 634, Fig. 472.

[2] *Ibid.*, p. 632, Fig. 470.

Male adorants on signets.

It may be sufficient here to reproduce the seal-type of which repeated copies were found in the Central Palace Sanctuary of Knossos, in which a youth, of much the same proportions as the bronze figurine illustrated in Fig. 320 and in a similar adorant attitude, stands before the 'Minoan Rhea' on her lion-guarded peak (Fig. 323).[1] In this act of homage both the Goddess herself and her baetylic image in the pillar-shrine may be taken to share. On three signet-rings from Mycenae and another from Ligortino in Crete female devotees are depicted raising their arms in a similar manner before baetylic shrines, not accompanied by any figure of the divinity, but in two cases containing sacred trees.

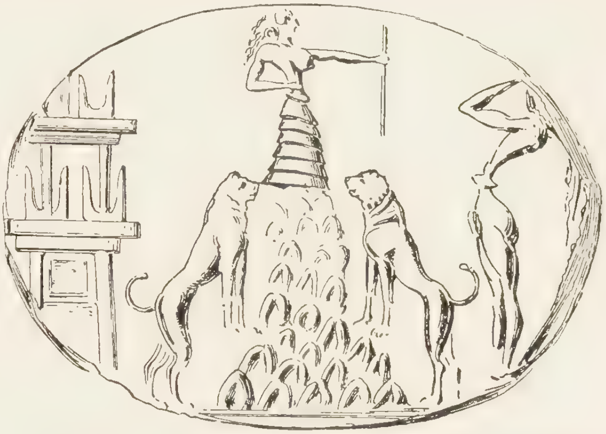

Fig. 323. Signet-type from Central Palace Sanctuary, Knossos.

Figures like the above bronzes must be placed in the category of *anathemata* of votaries, and there is not sufficient ground for attaching to them any divine relationship with the Goddess. In no case do they wear a distinguishing tiara, and in the one instance (Fig. 322) where the head is covered by a brimmed hat or *petasos* we may reasonably regard it simply as a rustic feature adapted to the sunny climate of Crete—the wearing, indeed, of broad-brimmed hats of straw in certain country districts of the Island can be traced back to early Venetian times.

The signet-types referred to can also only be taken to depict devotees.

Armed Youthful Male Figures grouped with Goddess.

Armed youthful male figures grouped with Goddess.

But a more intimate relationship between the Goddess—there identified by her ceremonial seat with the sacred tree behind—and a youthful male figure is certainly perceptible in the scene presented in Fig. 324 which appears on an electrum ring from Mycenae. The comparatively short stature of the youth, who holds a spear in the right hand, as compared with the seated

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[1] See *P. of M.*, ii, Pt. II, p. 809, Fig. 528.

[2] See my *Myc. Tree and Pillar Cult*, p. 85 (183), Fig. 57, p. 86 (184), Fig. 58, p. 87 (185), Fig. 59, and p. 91 (189), Fig. 63. In the first and the third case a tree or trees is also shown. Compare, too, p. 84, Fig. 55 (84), where a male adorant stands before a pillar shrine from within which a tree rises.

Goddess, may be due in part at least to some principle of isocephaly—though the sinewy thighs belong rather to a youth than to a young boy. Whether or not the peaked shape of the upper part of the Goddess's head represents some kind of tiara must remain uncertain owing to the summary character of the engraving. She is robed in a short flounced skirt, and both figures wear anklets and bracelets on their right arms. Otherwise, except for the narrow belts, both are entirely nude.

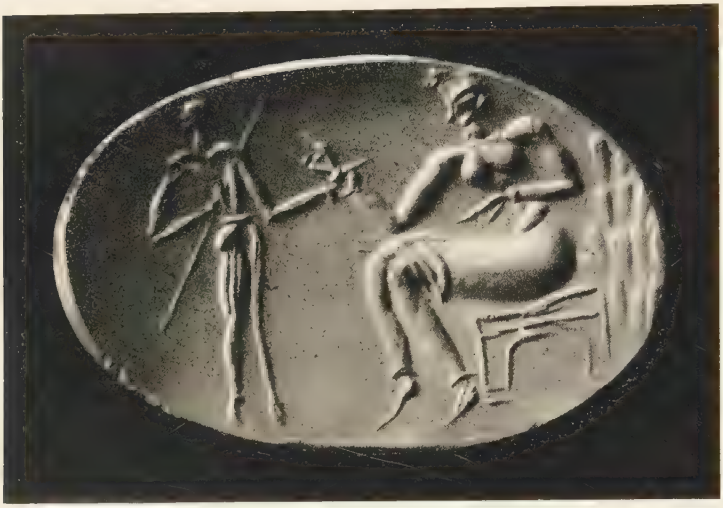

FIG. 324. SCENE ON ELECTRUM SIGNET-RING FROM MYCENAE.

The interesting point here is the way in which the hands are disposed. In Furtwängler's opinion,[1] the youthful armed figure here presented is actually grasping the wrist of the seated Goddess, in the attitude (χειρὸς ἐπὶ καρπῷ) that among the Greeks was the symbolic gesture for the bringing home of a bride. In my *Tree and Pillar Cult*[2] the view is expressed that both figures repeat the same gesture in which a thumb and forefinger are pressed together, a widespread expedient in sign-language for indicating agreement, and which to the modern Neapolitan still conveys the idea of plighted 'troth'. It will be seen that both views are substantially in agreement as to the sealing here of an intimate relationship between the two figures. But it must be said that the whole impression produced by the design is rather the relationship of a son to a mother than of a husband to a wife or mistress.

Boyish martial figures.

Have we not here the same youthful divinity, martially arrayed, whose burial place within its slender 'temenos' has been illustrated above from another gold signet,—with the miniature Minoan shield hung up beside the little gravestone?[3] The mourning figure, there identified with the

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[1] *Antike Gemmen*, iii, p. 36, and Fig. 14.

[2] p. 78 (*J. H. S.*, xxi, 1901, p. 176). Cf. Fig. 51.

[3] See above, pp. 143, 144, and Fig. 93, and compare my *Myc. Tree and Pillar Cult*, p. 78 [176] seqq. Cf., too, *P. of M.*, i, pp. 161, 162, and Fig. 116, and ii, Pt. I, p. 278.

Adonis and Hyakinthos compared.

Goddess, leaning over the parapet of the sepulchral enclosure has been compared with parallel scenes in which the Syrian women mourn Adonis dead. Another religious signet-type, in which the Goddess is associated with a figure of a male child armed with bow and arrow, beside what seems to be an analogous mourning scene,[1] may well call up a vision of a Minoan equivalent of Hyakinthos — whose name, as is well known, belongs to the older ethnic stratum.

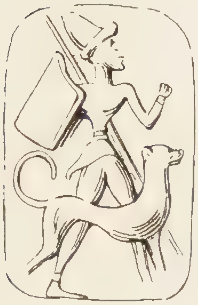

FIG. 324 A.
ARMED GOD WITH LIONESS: CLAY SEALING, KNOSSOS.

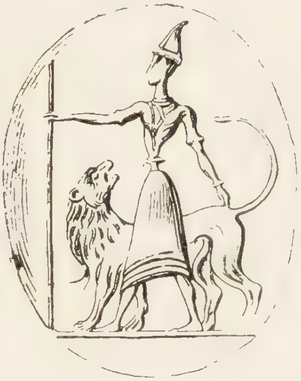

FIG. 325.
ARMED GODDESS WITH LION: CLAY SEALING, KNOSSOS.

Exceptional appearance of mature warrior divinity: but not coupled with Goddess.

It is to be noted that in these and other cases, such as the figure descending before the obelisk on the gold signet from Knossos,[2] the male armed figure is of comparatively small dimensions, and must be taken to represent a boy rather than a man. In two instances, indeed, we see what may be regarded as an armed male God of mature proportions. The first of these, a spearman with a shield and conical head-piece, who has a lioness beside him, is on a seal-impression from the Temple Repositories, here reproduced (Fig. 324 A),[3] and has a curiously Hittite appearance. The second, a bowman beside a lion, on a sealing from Hagia Triada,[4] also wears a peaked cap.[5]

It is true that another seal-impression from the Temple Repositories at Knossos (Fig. 325),[6] in which the Goddess in a peaked cap and armed with a spear, walks beside a lion, who turns his head to look up at his divine mistress, suggests a certain parallelism with the armed male divinities, though there is no actual grouping of the two classes. But these figures of what must be recognized as adult warrior Gods fit in with the evidence of the growing influence of Oriental models. A good example of this is supported by a jasper signet-ring found by Tsountas at Mycenae,[1] on which we may certainly recognize Gilgames in a Minoan guise, grappling with two lions.

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[1] *P. of M.*, ii, Pt. II, p. 842, Fig. 557. The gold signet-ring itself is in the Ashmolean Museum. In this case the mourning female figure leans over a *pithos*, recalling the use of these for sepulchral purposes.

[2] *Ibid.*, i, p. 160, Fig. 115; *Tree and Pillar Cult*, p. 72 [170], and Fig. 48.

[3] *P. of M.*, i, p. 505, Fig. 363, *b*.

[4] *Ibid.*, Fig. 363, *c*, and cf. *Mon. Ant.*, p. 44, and Fig. 40.

[5] An adult male figure, clearly of a divine nature, is also seen standing above 'horns of consecration' between a winged goat and a Minoan 'Genius' on a gem from Kydonia (*P. of M.*, i, p. 708, Fig. 532).

[6] *Ibid.*, p. 505, Fig. 363, *a*. A similar figure occurs on a seal-impression from Zakro (Hogarth, *B. S. A.*, xvii, p. 265, Fig. 2).

Later appearance of images of Syrian Resheph: exotic character.

It is noteworthy, indeed, in this connexion, that at a somewhat later date we have abundant evidence of the diffusion throughout the Minoan and Mycenaean world of small metal images that clearly reflect the influence of a Syrian warrior divinity—the Lightning-God Resheph.

Examples of some of these are given in the note appended to this Section (p. 477 seqq., below), side by side with their Semitic prototypes and the parallel derivations of the same that occur in the Hittite regions North and West of Taurus. The importance of these Resheph figures in their bearing on the true products of Minoan religious art is really the contrast that they afford. They represent a wholly un-Minoan type. The stiff conventional attitude is as foreign as their Egyptian garb, which has no connexion with the traditional Minoan and no relation to any later costume of Early Greece. Better than any other part of our material, they illustrate the fact that cult images of an adult male God were a late and exotic intrusion.

Idea of male consort foreign to matriarchal religion.

The matriarchal stage of society, to which the Minoan religious system owes its origin, was itself incompatible with the idea of a male consort, since, by its very essence, the fatherhood of children was an unknown or at any rate a non-essential element. In his fundamental work demonstrating the intensive survival of Minoan Religion in that of the Greeks Professor Martin Nilsson—delving down through the Hellenic strata—has laid great stress on the large part which foster-parents, both animal and human, play in primitive legends regarding the upbringing of divine children. In their Greek form the tale of the birth and upbringing of the Cretan Zeus, the hiding in a cave from Kronos, the guardianship of the Kouretes, are all of this class.

Foster-parents of Divine Child.

In view of the frequent records in the Island, both from literary sources and on coin types, of the nurture of the holy babe of Rhea by a goat and wild bees, or occasionally by a cow, and of other divine offspring by a bitch or she-wolf,[2] and, indeed, of the universality of such stories, still renewed in our days,[1] it is quite open to us to interpret the seal-type from the Repositories reproduced in Fig. 326 [2] as the infant god nourished by a horned sheep.

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[1] Tsountas, Μυκῆναι, Pl. V, 5 (cf., too, Perrot et Chipiez, *Hist. de l'Art*, vi, p. 845, Fig. 428. 21). A further illustration of the influence of such scenes is to be found on the signet-ring in the Péronne Museum (*ibid.*, vi, p. 846, Fig. 430), where two divine heroes are seen struggling with lions. In the second of these we must recognize the companion of Gilgames (Isdubar), Hea-bani (cf. J. Menant, *Recherches sur la Glyptique Orientale*, i, p. 84 seqq.).

[2] The evidence is collected by Nilsson, *op. cit.*, pp. 466–9.

Young armed God of Cretan signets.

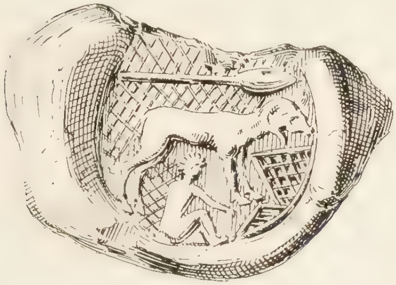
FIG. 326.
SEAL-IMPRESSION SHOWING INFANT BENEATH HORNED SHEEP.

That the young armed God that we have to deal with in the Cretan signet-types in truth represents the 'Cretan Zeus' of later tradition seems to be a reasonable hypothesis. According to the interpretation given in this work we actually have a glimpse of his Holy Sepulchre, while elsewhere we see the Goddess recalling him from some celestial abode. All this agrees with the idea of the 'mortal God' which was such a stumbling-block to Greeks. That his death and return to life were of annual celebration in relation to the seasonal re-birth of Nature is an almost irresistible conclusion.[3]

Mortal character.

Minoan Goddess resurgent as Gaia.

It is not an objection to this—for there is no logic in folk belief—that on the remarkable bead-seal from Thisbê, Fig. 319, the Minoan Goddess is herself seen rising from the earth like Gaia and Persephone, and, as in their case, holding the poppy capsules that stand as a symbol of reproductive power. The seeds or flowers in her hand, the tree-form with which she is so repeatedly associated, and with the juice of whose fruit she is regaled, the beasts of the field and the fowls of the air of which she appears as the visible Mistress and Protector, mark her clearly as a Nature Goddess.

As an armed Goddess.

As a Great Mother she must certainly be recognized as a sister form to the divinity whose cult was so widely diffused in later times throughout Asia Minor and its borders. But another aspect of her spiritual being must also constantly be borne in mind, which brings us nearer to the sterner side of Ishtar, to which more importance was attached in old Chaldaea. She is an armed Goddess, whose distinguishing weapon is the sacred Double Axe, but who also at times wields the spear and Minoan shield or the bow and arrows of the huntress. She is the female counterpart of the divinity—first and foremost a Thunder-God—predominant on the Anatolian side and in a wide North Syrian region, the underlying ethnic element of which seems also to have been of 'proto-Armenian' stock. As 'Lady of the Double Axe' she stands in fact as the equivalent of Teshub and Resheph, together with other kindred forms of male divinity, amongst which in later days the Zeus of Labranda and that of Doliché are prominent.

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[1] As, for instance, the versions of the tale of a boy suckled by wolves, of which there seems to be an inexhaustible stock in Indian villages. I, myself, heard of one in Montenegro who was reported to have been brought up by bears.

[2] Cf. *P. of M.*, i, p. 515, Fig. 373. The fact that it is a horned animal need not stand in the way of such an interpretation. In Classical days we see Telephos nurtured by a horned deer.

[3] Nilsson, *op. cit.*, p. 482.

Warrior son appropriate.

For such a Goddess a warrior child, fully armed from his birth, was most appropriate—the equivalent of Athena sprung fully panoplied from the axe-split skull of Zeus. It is thus, too, that we find Leto rejoicing to see her new-born child, Apollo, at once claim his bow and arrows:

Χαίρει δέ τε πότνια Λητώ,
οὕνεκα τοξοφόρον καὶ καρτερὸν υἱὸν ἔτικτεν.[1]

Evidences of Simpler Relationship of Child to Mother.

Unarmed boy-God.

Oriental parallels: with reserves.

But there were other aspects of the relationship of the Minoan Goddess to a Divine Child in an unarmed guise. The analogy, indeed, with parallel examples of divine pairs on the Anatolian and Syrian sides, which go back in their main outlines to the Sumerian Dumuzi[2] (Tammuz) and Inanna (Ishtar) makes it highly probable, in view of other evidences of Oriental influences, that the Cretan boy-God may in some respects be compared with Adonis and Attis so closely linked with the 'wounded Thammuz'.

Except the mourning scene itself, detailed evidence as to the Cretan versions of the story fail us, though, in view of the sustained purity of all Minoan artistic representations, it is difficult to believe that the more degrading episodes, such as we see them at Hierapolis and elsewhere, could have had any part in the insular tradition. That the mortal side of the young God and the mourning scene attendant on his death were specially celebrated at Knossos, we may well believe, when it is remembered that his Holy Sepulchre was traditionally placed on the neighbouring peak of Juktas. The explorations described in the First Volume of this work[3] have now shown that remains of an actual sanctuary of the Goddess here exist on the crest of the ridge, associated with a votive stratum like that of Petsofà in the East of the Island. The actual sanctity of this 'high place' is, indeed, perpetuated by the little pilgrim Church of 'Christ the Lord', a little farther along the ridge.

Considering the relatively diminutive size of the male figures with which the Goddess is associated in the Minoan scenes, it seems most reasonable to assume that we have here the simple human relationship of a mother to a

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[1] *Homeric Hymn* (iii) *to Apollo*, v. 12.

[2] See, especially, S. Langdon, *Tammuz and Ishtar*, Oxford, 1914, and the general review of the evidence, including the results of Zimmern's researches by A. Jeremias, Art. *Tamuz*, in *Roscher's Lexikon* (1924).

[3] *P. of M.*, i, p. 156 seqq.

Relation of mother and child suggested by Minoan examples.

young son. It is impossible, indeed, in this divine association, which goes back far beyond the dawn of history, not to recognize the central feature of the old Cretan cult as handed down to us by Greek writers—a feature that in Greece itself took a secondary place, but which has acquired an incomparably greater importance from certain aspects of the New Religion. As the author of *The Cults of the Greek States* has observed,[1] 'the worship of Rhea and the infant Zeus, which in Crete was associated with the idea of the death and resurrection of the God . . . must be regarded as an important phenomenon in the history of Religion, a Cretan contribution to the development in the Mediterranean of the worship of a Holy Infant'.

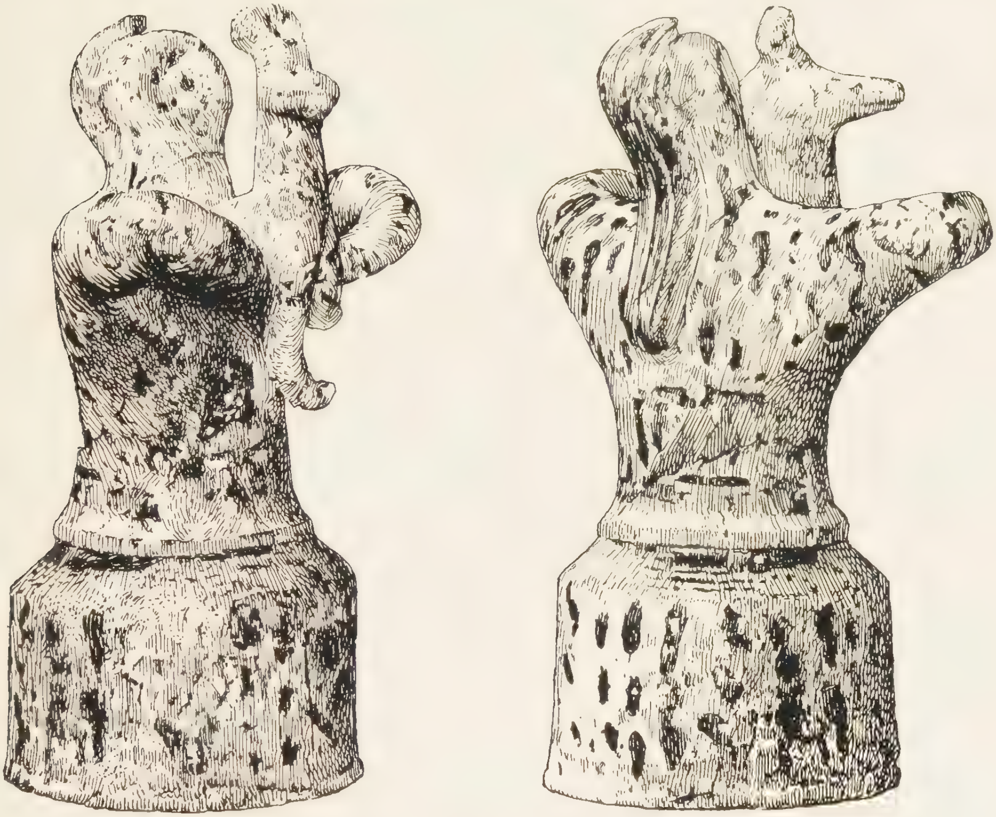

FIG. 327. PAINTED CLAY IMAGE OF GODDESS AND CHILD. MAVRO SPELIO, KNOSSOS.

In the ivory group, as conjecturally restored by me in Fig. 318, the Divine Child salutes his lady Mother in her aspect of Goddess of the Lower World. In the remarkable painted clay image, Fig. 327, the motherly

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[1] L. R. Farnell, *Cretan Influences in Greek Religion* in *Essays in Aegean Archaeology presented to A. E.* (Oxford, 1927), p. 24.

Terra-cotta idol from Knossian tomb representing Mother Goddess.

relationship is still more strongly brought out. This figure, already referred to in this work, was found by Mr. E. J. Forsdyke in a tomb of the Cemetery of Mavro Spelio at Knossos,[1] and its similarity to the painted clay idols found in the small shrine of the Double Axes[2] warrants us in regarding it as an object of cult. The characteristic shape, with the cylindrical termination below, though it seems to be assimilated to a truncated baetylic pillar, is best explained as a direct outgrowth of a more or less bell-shaped type of skirt characteristic of some of the female images from the votive sanctuary of Petsofà,[3] and this view indeed is substantiated by the gradual slope visible in the present instance between the well-marked girdle and the cylindrical base.[4]

We have here in fact an illustration of the revival of earlier religious traditions in a somewhat crude and rustic form, that characterizes the squatters who after the final overthrow of the Palace as a Palace reoccupied parts of its ruins as well as those of the adjoining 'Little Palace'.[5] This fact in itself only adds to the religious value of this image, which in no way reflects any foreign influence, due, for instance, to Achaean invaders.[6] Though the idol, and the contents of the tomb generally, belong to a fairly advanced L. M. III stage, the culture is still very purely Minoan.

The Goddess here, with her arms turned inwards, holds up the Divine Child by his middle, as if for him to receive adoration. The infant himself seems to have his arms folded in front of him.

Signet-ring from Thisbê.

It is possible now to describe another analogous type of the Minoan Mother Goddess on a hitherto unpublished signet-ring of great interest from one of the later tombs of Thisbê, acquired from the same source as the other remarkable intaglios on rings and bead-seals from that site (Fig. 328).[7] The ring itself was of poor alloy, and apparently of slightly later fabric than the other engraved signets from the same find-spot. The vessels shown, however, are in a good style, much resembling those on one of the bead-seals, where the Goddess is depicted pouring a libation from a ewer into what appears to be a metal jar. On the whole it does not seem safe to bring down the date of this signet-ring later than to a Mainland-Mycenaean phase equivalent to L. M. III *a*.

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[1] E. J. Forsdyke, *The Mavro Spelio Cemetery at Knossos* (*B. S. A.*, xxviii), pp. 290, 291, and Pl. XXI. From Tomb VII B, 9. Cf., too, *P. of M.*, ii, Pt. II, p. 557, and Suppl. Pl. XXI. The height of the figurine is 10·5 centimetres.

[2] *P. of M.*, ii, Pt. I, p. 338 seqq.

[3] E. g. J. L. Myres, *The Sanctuary Site of Petsofà* (*B. S. A.*, ix), Pl. XI, 28.

[4] Other transitional examples exist.

[5] Compare, for instance, the natural concretions used as objects of worship in the 'Fetish Shrine' of the Little Palace (*P. of M.*, ii, Pt. I, p. 346, Fig. 198).

[6] The painted clay images (known as 'dollies' to excavators) found so abundantly in sepulchral deposits of the Mycenaean Mainland are not, like the partially contemporary Cretan images, specially connected with shrines. The discovery of an analogous figure of Early Helladic date by Dr. Carl Blegen at Zygouries, near Kleonae, supplies a clear indication that they were of Mainland derivation (Blegen, *Zygouries*, Harvard Univ. Press, 1928, Pl. XXI, 1, and cf. pp. 185, 186).

[7] A. E., *Ring of Nestor, &c.*, p. 1 seqq. (Macmillans, 1925), *Sepulchral Treasure of Gold Signet-ring and Bead-seals from Thisbê, Boeotia*. Mr. W. A. Heurtley, who has visited the site, kindly supplied me with information as to the rock tombs there visible which are of the ordinary chamber type with *dromoi*. Un-

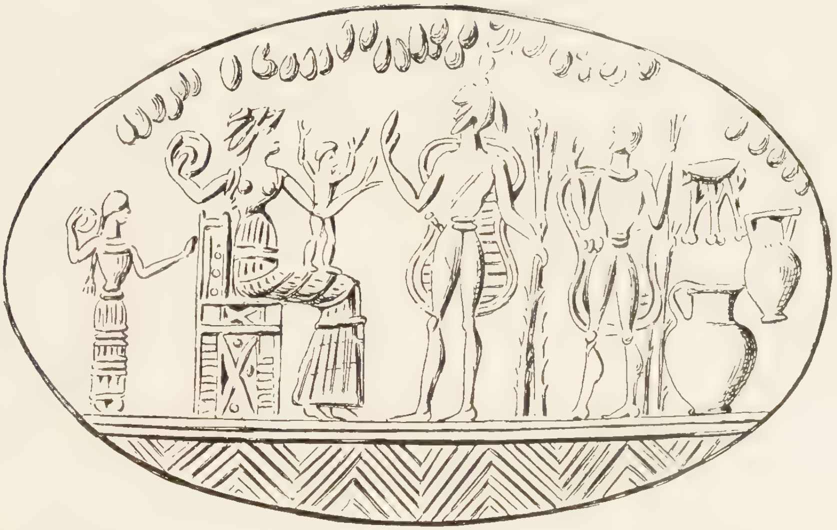

FIG. 328. SIGNET-RING OF BASE GOLD FROM TOMB, THISBÊ, SHOWING SCENE OF ADORATION OF MOTHER GODDESS AND CHILD. (*c.* $\frac{4}{1}$)

The lower or 'exergual' part of the bezel is filled with a decorative design consisting of repeated chevrons, recalling the similar motive that fills the zone of a painted 'amphora' from grave No. 7—a 'pit-cave'—of the Zafer Papoura Cemetery at Knossos.[1]

The Goddess is seated on a throne with a back to it and cross lines between the legs that seem to betray the reaction of the 'camp-stool' type

fortunately the tombs containing the precious jewels were rifled by peasants, and no scientific account of the associations of the individual specimens is possible. I have been able, however, to inspect a series of other relics found with the intaglios, all of which were unquestionably genuine. Some of the objects in various materials have been already illustrated in my *Ring of Nestor*. These and other relics may be taken to date from L. M. I *a* to the Mainland equivalent of an advanced stage of L. M. III. Nothing, however, that came under my observation could be brought down to the proto-geometrical stage. This view is corroborated by specimens obtained by Mr. C. T. Seltman from the same source.

[1] A. E., *The Prehistoric Tombs of Knossos*, i (*Archaeologia*, lix), p. 27, Fig. 23. The centre-point of this cemetery is L. M. II–L. M. III *a*, and there is little or nothing of later date.

Seated Goddess and Child.

Goddess and attendant hold cymbals.

common in religious scenes both in frescoes and signets. She holds up in her left hand, as seen on the bezel, what looks like a disk with a small central cup which in the impression forms a boss, and her girl attendant behind—one we may suppose of her usual twin κοῦραι[1]—holds up a smaller object of the same kind in a similar manner. It seems probable that in this disk-like object with its central boss we must recognize a bronze cymbal, or, perhaps, two held together. The form in fact answers to that of the pair found by Dr. Xanthudides in the very late 'Cymbal-player's Tomb' at Moulianà in East Crete,[2] and very similar cymbals have been found in graves of the Egyptian Thebes[3] (see Fig. 329, *a* and *b*). The Minoan Rhea finds here a new link with Cybelê, who also frequently appears enthroned holding in one hand a *tympanum*.

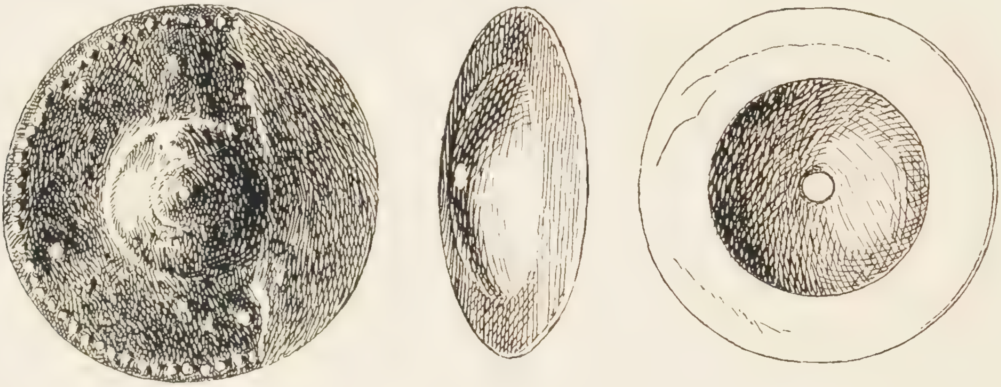
a *b* *c*

FIG. 329. BRONZE CYMBALS. *a*, FROM LATE MINOAN TOMB, MOULIANÀ, E. CRETE; *b*, *c*, EGYPTIAN THEBES.

The Goddess holds out her other arm with open hand in response to the adoring gestures of the two male figures who are seen approaching her, while, on her knees, the Divine Child stands upright, supported behind by his Mother's outstretched arm and with both hands upraised to greet the worshippers.

The two adorant figures, each of whom raises a forearm, are seen in the garb of warriors, wearing on their heads crested helmets, with cheek-

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[1] See above, p. 458, and *P. of M.*, ii, Pt. I, pp. 340–2.

[2] ’Εφ. ’Αρχ., 1904, pp. 46–8, and Fig. 11. The cymbals were 19 centimetres (*c.* $7\frac{1}{2}$ inches) in diameter, the boss being 8 cm. in diam. and 2·5 cm. in height, with a small perforation in the middle for a string of attachment.

[3] Wilkinson, *Ancient Egyptians*, i, p. 452, Fig. 222. That illustrated was $5\frac{1}{2}$ inches in diameter (*c.* 14 cm.).

Approached by adorant warriors with gifts.

Bearing reeds and metal vessels.

pieces, and tightly girt with Minoan belts, beside which are seen the heads of daggers or short swords. In one case there is visible a cross strap descending from the shoulder by which the shields of the 8-shaped type, though not long enough to cover the whole body, were slung on their backs. These shields show a ribbed under-surface. Though provided thus with defensive armour and the dirks, to demonstrate their heroic character, these two personages do not, as might have been expected, hold spears in their right hands. On the contrary, each grasps two budding stems—best seen in the case of the foremost figure—which must be certainly interpreted as some kind of vegetable offerings to the Goddess. Myrtle shoots with their aromatic odour, connected in their origin with ‘myrrh’, would be perhaps the most appropriate gift, especially when it is recalled that Myrrha, the mythical mother of Adonis, who was transformed into a myrtle bush,[1] must be regarded as the old Cypriote religious equivalent of the Cretan Rhea. But the plant to which these delineations bear the most obvious resemblance is unquestionably the reed, and here again, as in the case of the cymbals, it is impossible not to recognize a singular community with the cult of Attis and Cybelê. The first day, in fact, of the great annual feast of these divinities, that marked the return of Spring,—the 15th of March—was distinguished in the Roman Calendar as ‘the entry of the reed’,[2] when men, women, and children as ‘cannophori’ carried wreaths in procession.

This religious usage was itself said to have been an allusion to the exposure of the new-born Attis in the reed beds by the river Gallos—where the babe was nurtured by aquatic creatures—and, following the example of Pharaoh’s daughter, his discovery there by the Goddess.[3] Though the myth takes variant forms and the folk-tales are naturally inconsistent, the root relationship of Cybelê or of the kindred Ma to Attis was that of Mother to Son. In a hymn he is twice referred to as the son of Rhea.[4]

Behind the second adorant on the signet is a group of three vessels, including a tripod cauldron of a type somewhat resembling that from the

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[1] Apollodoros, iii. 14. 3. Cf. Frazer, *Adonis, Attis, Osiris* (1906), pp. 27, 28.

[2] In the Calendar (Philocalus: *sub anno* 354) the entry appears as ‘Id. Mart. Canna intrat’. On the vernal equinox, March 22, the entry ‘Arbor intrat’ marks the carrying in the felled pine that represented Attis dead.

[3] See especially A. Graillot, *Le Culte de Cybèle, Mère des dieux, à Rome et dans l’Empire romain*, pp. 117–19, and A. Loisy, *Les mystères païens et le mystère Chrétien*, p. 87 seqq. For Attis, see the fundamental work of H. Hepding, *Attis, seine Mythen und Sein Kult* (Giessen, 1903). The connected religious group is dealt with in Frazer’s masterly monograph, *Attis, Adonis, and Osiris*

[4] Hippolytos (*ref.* 5, 9): εἴτε Ῥέας μεγάλης, and Ἄττιν τὸν Ῥείης. See A. Rapp in *Roscher’s Lexikon*, s. v. *Attis*.

'Tomb of the Tripod Hearth' at Knossos,[1] but with rather longer legs, and, apparently, with the two handles not fixed on the rim but movable and hanging down. Below this is what seems to be a two-handled amphora, and a ewer with a single handle, recalling that from which the Goddess or an attendant is seen pouring liquid into a large metal jar on a gold bead-seal from Thisbê, and, again, on a seal-impression from the 'Archives' of Knossos.[2] These vessels clearly represent substantial offerings made to some Treasury of the Goddess at the time of the annual Epiphany of the infant God.

Scene in grotto over-arched with rocks.

The whole scene is arched over above with conventional rocks which in this case may well be thought to indicate the sacred birth cave or grotto.

Adoration of Magi compared.

It is hardly necessary to point out the striking parallelism presented by this whole composition to the Adoration of the Magi as traditionally imaged in Early Christian Art. The adorant figures, indeed, are in warrior guise, with shields and helmets in place of the Persian caps and breeks worn by the devout pilgrims in the other case. That only two are shown is itself not a feature of the discrepancy, since in the earlier wall-paintings of the Catacombs, unlike the finally fixed representation of the 'Three Kings', the number is either two [3] or four. As an episode in relation to a divine birth the pilgrimage of the Persian Magi to salute the new-born Alexander supplies an earlier example of the same story.[4]

The distinction of the different gifts 'gold, frankincense, and myrrh' is not very clear, but they are contained in shallow bowls, the gold in some cases being indicated by a wreath, while the bowl of the second figure contains a cake-like object, and the third some kind of grains. The element of treasure or metalwork is well borne out by the votive vessels.

Christian version on ring-stone.

It is interesting to compare—as more or less *in pari materia*—a jasper ring-stone found at Naples and dating probably from the Sixth Century of our era, on which the 'Adoration of the Magi' is depicted (Fig. 330). Here we have already the three Wise Men from the East of medieval tradition, later enshrined at Cologne. They approach the seated Virgin and Child, with flowing mantles as usually shown and holding out bowls containing the gifts, in this case apparently covered. Behind stands a figure, in whom we may, perhaps, recognize Joseph, while, above the Holy Infant, is seen the Star, never wanting in the Christian representation. The names of the Magi—Caspar, Melchior, Balthasar—constantly recur on rings as a protection against thunder and the elements, against various diseases, and to speed travellers on their way.[1] A charm begins:

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[1] See *P. of M.*, ii, Pt. II, p. 634, Fig. 398, p.

[2] A. E., *Ring of Nestor, &c.*, pp. 17, 18, Fig. 19, and Pl. II, 2. A scene of the same kind (otherwise unknown) with similar vessels was subsequently found on a sealing from the 'Room of the Archives' at Knossos, in a heap of fragments first examined in 1922, and subsequent to the discovery of the Thisbê jewels—a remarkable proof of their authenticity. (*Ibid.*, p. 18, Fig. 20.)

[3] E. g. Garrucci, *Storia dell' Arte Cristiana*, i, Pl. 58. The Virgin and Child are here facing with one king on either side.

[4] Cicero, *de Divin.* i. 23. 47, and cf. 41. 90.

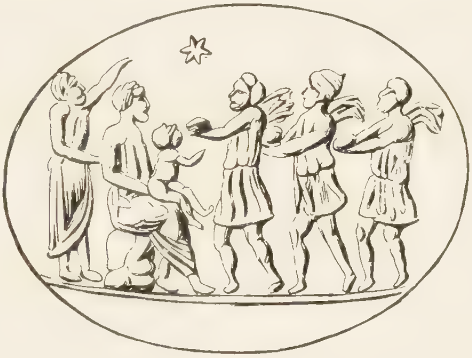

Fig. 330. Haematite Intaglio showing Adoration of the Magi. VIth Cent. a.d.

Caspar, fert myrrham: thus Melchior:
Balthasar aurum.

In one feature the design on the Minoan signet comes truer to religious tradition than these Christian examples. The indication of the overhanging rocks above illustrates the legends that in Crete and in the Anatolian and Syrian regions, where we find evidence of parallel cults, connect the birthplace with a sacred cave or rock shelter. In the same way the Christian tradition regarding the scene of the Nativity placed it in the grot of Bethlehem, which the piety of the Empress Helena afterwards incorporated in the crypt of her memorial Church. This was, in fact, to be the prototype of the *praesepe* which, in the Basilica Liberiana and elsewhere, was to become a regular part of the Christian temple.[2] Bede describes it as 'resembling a natural rock-shelter'.[3] That at Bethlehem was known as the ἱερὸν ἄντρον.[4]

The Minoan worship of the Mother Goddess and divine Child of which we have such remarkable evidence on the signet-ring from Thisbê presents no feature that could shock the susceptibility of modern orthodoxy. The parallel group of cults of which we have traces on the Anatolian and Syrian side cannot from the point of view of Comparative Religion be dissociated from that of pre-Hellenic Crete, though the Minoan relationship is rather that of Mother and Child than of mistress and youthful paramour. If we may believe that the underlying stock throughout this more Easterly region—the proto-Armenoid as here defined in those parts much overlaid by Semitic and other exotic elements—was essentially the same as that of pre-historic Crete, it seems possible that the insular type of the cult, such as is illustrated by the Thisbê signet-ring, may have answered more nearly to its original character.

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[1] The names were specially efficacious against the falling sickness. Cf. *Archaeology*, vii, p. 93, and W. Jones, *Finger-ring Lore* (1877), p. 144. Prof. R. M. Dawkins informs me that the names of the three kings were engraved on medieval spurs, a very appropriate application. 'Caspar' also takes the form 'Jasper'.

[2] See on this especially Hermann Usener, *Das Weihnachtfest*, Pt. I (second edition, 1911).

[3] 'Quasi quoddam naturale semiantrum (p. 311, Geyer).

[4] Eusebius, *Vita Constantini*, 58, p. 321 Vall. Constantine himself adorned it. According to Antoninus Martialis the original clay crib was renewed in silver.

Birth grotto of Bethlehem traditionally linked with Thammuz.

In the old Sumerian version of the cult of Dumuzi (Thammuz), to which, as suggested above, the East Mediterranean cult may be fundamentally indebted, the god was also regarded as the son of Inanna (Ishtar). That the later Religion, which took its rise in the same region and is still with us, had no relation to the local cult that in some respects anticipated its central feature, is in itself extremely improbable. The tradition, indeed, of the birth grotto of Bethlehem itself was in a strange way linked on to the earlier Religion. It was said to have been the scene of the death of Thammuz or Adonis. 'Bethlehem', says St. Jerome, 'regarding which the Psalmist sings "the truth is sprung out of the earth",[1] was erstwhile shaded by the Grove of Thammuz, that is, of Adonis, so that where Christ first cried as a Child the paramour of Venus was once bewailed.'[2]

Minoan versions show simple relationship of child to mother.

What is true of the subject of adoration in the group on the Minoan signet holds equally of the little ivory figure described above. It is not, indeed, an infant in arms, but the tender age that it implies, as well as its ingenuous mien, present perhaps the most living embodiment of young boyhood to be found in the whole range of Ancient Art. It suggests nothing of the more sensuous associations of Adonis, Kinyras, or Attis. No Astartê, no Paphian Aphrodite, no 'Syrian Goddess', stands here in the background. Rather, the image speaks clearly of the simple and natural relationship of the divine Child to his Mother.

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[1] Psalm lxxxv. 11 (A.V. 'Truth shall spring out of the earth').

[2] Jerome, *Ep. lviii, ad Paulinum presbyterum, c. 3* (*Corpus Scriptt. Eccles. lat. recensuit Isidorus Hilberg*, Pt. I, p. 532): 'Bethleem, de quo Psalmista canit "veritas de terra orta est", lucus inumbrabat Thamuz, id est Adonidis; ubi quondam Christus vagiit, Veneris amasius plangebatur.' Paulinus himself harps on the same theme (*Epistola* xxxi. *ad Severum*: *op. cit.*, ed. Hartel, p. 290): 'In Bethlehem ubi "agnovit bos possessorem suum et asinus praesepe domini" principes hominum, infitiati salvatorem deum, infames hominum amores mortesque coluerunt. Prodita novo sidere regis aeterni, ubi supplices cum suis opibus adoraverunt Chaldaei ibi barbaras libidines sacraverunt Romani. Ubi natum salvatorem cum exercitu angelorum concinentes caelesti gaudio salutaverunt inlustrata nocte pastores, ibi Veneris amasium mixtae semiviris planxere meretrices.'

Supplement to Section.

LATE MINOAN AND MYCENAEAN IMAGES OF THE SYRIAN LIGHTNING-GOD RESHEPH; WITH SYRIAN AND HITTITE COMPARISONS.

Late Minoan and Mycenaean image of Resheph type.

A series of representations of the specimens of these figures from Minoan and Mycenaean Greece referred to on p. 466, above, is given in Fig. 331. The finest of these, though the upper part of the head-piece is much battered, is the silver figurine from Nezero[1] in Northern Thessaly (Fig. 331, *a*). A bronze figurine from the votive Cave of Hermes Kranaios at Patso, near Sybrita,[2] West of Ida (Fig. 331, *b*), gives a good idea of the conical head-piece and overlapping kilt, while for both this and the action of the arms good evidence is supplied by the specimens (Fig. 331, *c*, *d*) found at Tiryns and Mycenae.[3] It will be seen that these specimens from Crete and Mainland Greece show in some cases a better and more naturalistic fabric than most similar figurines from Syrian sites, where they represent the Lightning-God, Resheph, and we may note that they were largely, at any rate, of indigenous fabric.

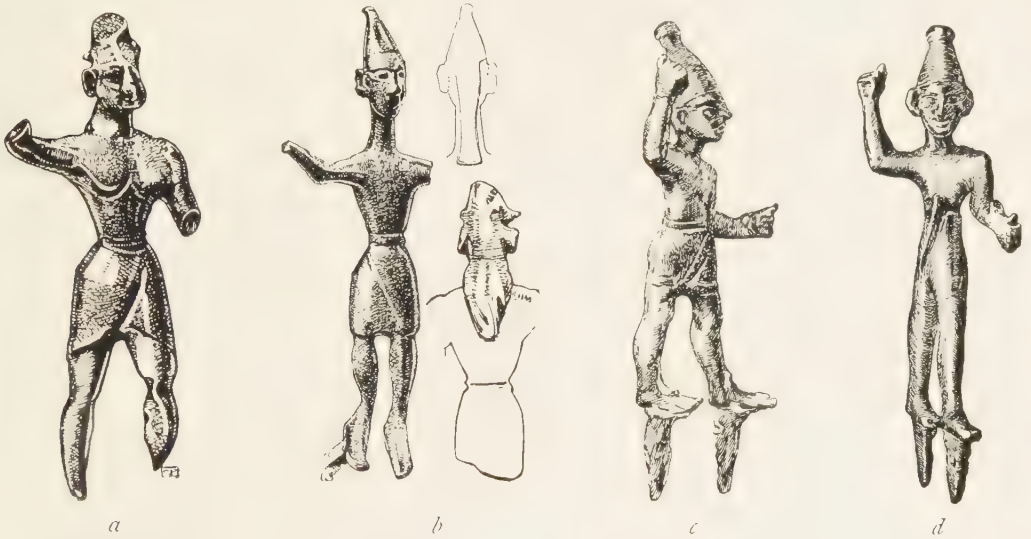

FIG. 331. MINOAN AND MYCENAEAN BRONZE FIGURINES DERIVED FROM IMAGES OF THE SYRIAN LIGHTNING-GOD, RESHEPH: *a*, NEZERO (THESSALY); *b*, PATSO, CRETE; *c*, TIRYNS; *d*, MYCENAE. (*c.* $\frac{1}{3}$)

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[1] See my *Myc. Tree and Pillar Cult.* p. 28, Fig. 16. (Ashmolean Museum, Oxford.)

[2] *Ibid.*, p. 27, Fig. 15.

[3] See Perrot et Chipiez, vi, pp. 757, 758, Figs. 353, 354.

Syrian examples.

Some comparative examples of the Syrian Resheph are given in Fig. 333. Coming from a region so constantly under the direct sway of Egypt they take from the first a characteristic Egyptian guise. The cylindrical helmet with the protuberance above is in fact the 'white crown' of Upper Egypt, the kilt is the Egyptian *pshent*, and the mace—at times the *khopesh*—and the shield with its rounded top are Egyptian arms.[1] The Syrian element comes in, however, occasionally in the diadem round the hair—sometimes super-added to the head-piece, Fig. 333, *a*, *c*,[2] and with the head of a gazelle attached to it above the forehead. The same type occurs on a cylinder (Fig. 333, *d*).[3] The Phoenician *stela* from Amrît (Fig. 332)[4] certainly seems to represent the same divinity. This God is also imaged in the fine figurine, Fig. 334, of bronze with some remains of silver plating, said to have been found on a foothill of the Lebanon near Beirût.[5] This piece, both from its garb and its characteristic action, stands very near the Minoan and Mycenaean types. The lion standing on a twin peak beneath the figure on the Amrît *stela* suggests the lion that accompanies the male divinity on the Knossian sealing (Fig. 325, above).

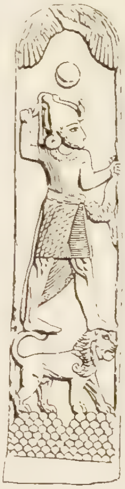

FIG. 332. PHOENICIAN *STELA*, AMRÎT.

Comparative versions of Hittite Thunder-God Teshub.

Figures of the Hittite Lightning-God Teshub from the North Syrian (see Fig. 335) and Cappadocian regions display a certain parallelism with these,[6] the conical head-piece again pointing to an influence from the Syro-

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[1] On the types of Resheph, see especially W. Max Müller, *Asien und Europa*, pp. 311, 312.

[2] Cf. Wilkinson, iii, *The Ancient Egyptians* (1878 ed.), pp. 234, 235, and Pl. LV.

[3] J. Menant, *Glyptique Orientale*, Pt. II, p. 204, Fig. 205.

[4] *Collection de Clercq*, Vol. ii, Pl. 36. See p. 234 seqq. '*Stèle Phénico-Hittite*': the Phoenician inscription is variously interpreted (*op. cit.*) by Messieurs Ph. Berger and Clermont-Ganneau. Monsieur Louis Speleers, in his useful comparative study on two Syro-Hittite figurines (*Syria*, iii, 1922, p. 134 seqq., and Pl. XXVIII) identifies the relief with Resheph.

[5] Obtained by Sir Wollaston Franks from Beirût (*Proc. Soc. Bibl. Arch.*, xvi, pp. 89, 90, and Plate). It is 4¾ inches high without the feet. Behind the helmet the rivets are visible by which the silver plate had been attached there. The eyes had been inlaid. The figurine is in the British Museum.

[6] The finest example of a bronze figurine of this class is that acquired by the Berlin Museum, which, however, has lost its head-piece, this having been separate from the lower part of the head (see Ed. Meyer, *Reich und Kultur der Chetiter*, pp. 108, 109, and Fig. 33). In this respect and its general style, this figure closely compares with one from Latakieh (Laodicea) published by Helbig, *Sur la Question Mycénienne*, pp. 15, 16, Fig. 7. In its good style it compares with a relief of the same divinity inside the town-door of Boghaz-keui (*op. cit.*, Pl. IX). For some other varieties of Hittite bronze figures, see the comparative group given by Louis Speleers in

Egyptian side. In this case the God often holds a thunderbolt, and at times a double axe, anticipatory of Jupiter Dolichenus. The relationship of these divinities to the Carian God of the *labrys* or double axe—the Zeus of Labranda—suggests a link of connexion with the Cretan cult at a time when the idea of an adult male divinity was in the ascendant.

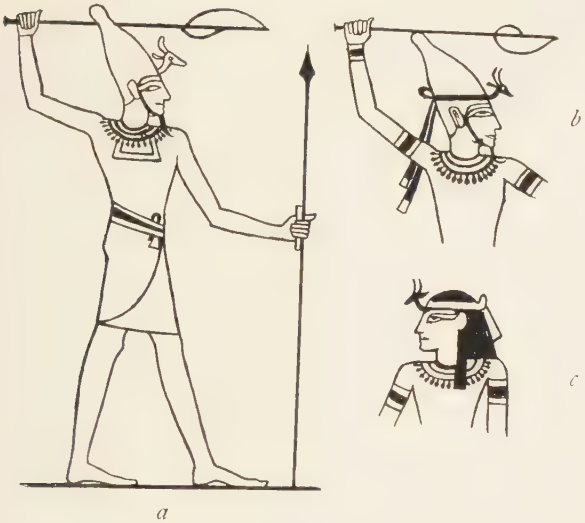

Fig. 333. *a, b, c,* Egyptian Representations of Syrian Lightning-God, Resheph.

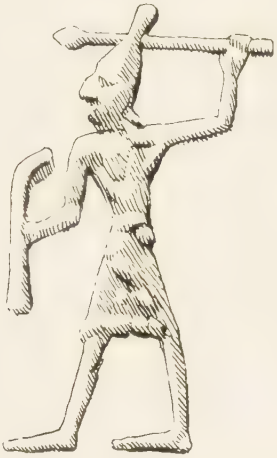

Fig. 333. *d,* Resheph on Cylinder ($c.\ \frac{2}{1}$).

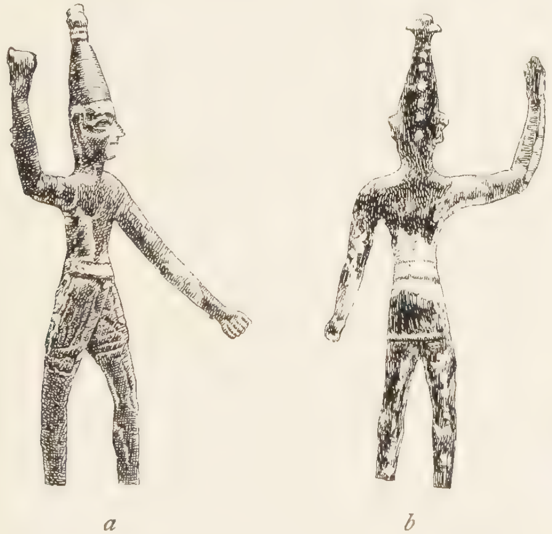

Fig. 334. *a, b,* Bronze Figurine with Silver Plating found near Beirût ($c.\ \frac{1}{2}$).

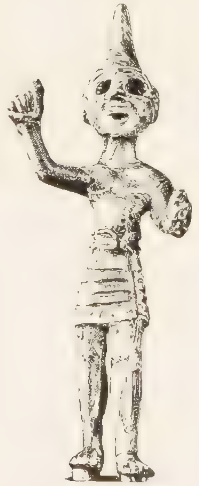

Fig. 335. Bronze Figurine from North Syria.

Syria, iii (1922), p. 134 seqq. (Plates XXVII, XXVIII), *Deux Figurines Syro-Hittites.* The peaked head-piece is a characteristic of the Hittite class.

Apollo of Amyklae identified with Resheph in Cyprus.

The approximation of the Late Minoan bronze images illustrated above to the figure of the Syrian God Resheph finds, it may be observed, a curious sequel in later Cypriote cult. The first Greek colonists took over from his Arcadian shrine at Amyklae the worship of the local Apollo, in whom we must recognize the reduplicated form of the earlier Hyakinthos, whose tombstone there indeed represents his baetylic image. At Kition, to which the cult of the Amyklaean Apollo was transferred, the Phoenician king (*Ϝάναξ*), Baalram, dedicated a statue to the God, with the bilingual inscription—*τῷ Ἀπόλλωνι τῷ Ἀμυκλοῖ*—in Cypriote letters[1] and, in the Phoenician version, to Resheph Mikal.[2] It remained for Mikal's Alexandrian temple, the foundation of Cleopatra, to be re-consecrated by the Patriarch Alexander, about the time of the First Council of Nicaea, as a church of the Archangel Michael.[3]

'Resheph Mikal' assimilated to Archangel Michael.

Hyakinthos earlier related to Mother Goddess.

When the evidence of the cult of the Great Minoan Mother in the actual vault of the dead is borne in mind, it is reasonable to suppose that that at Amyklae Apollo himself may have later on replaced the Goddess, and the younger divine associate Hyakinthos would represent her son. In the assimilation of Apollo here with Resheph we may perhaps see the reflex influence of the Minoan connexion with Cyprus, which, as has been shown above,[4] begins early in the Late Minoan Age. Cyprus may well have played a part in diffusing these small images of the Syrian Lightning-God through the Minoan and Mycenaean world. But, considering the late date of some of them, we may well believe that the rising Phoenician commerce also contributed in the dissemination of this Syrian type. Bronze figurines of the same characteristic form and attitude in fact reached the Coast of Spain.[5] Even the prototypes of these figures—which are Syrian and not Hittite—hardly go back beyond the Fifteenth Century before our era, and both in Crete and Mainland Greece they may be taken to belong to the very latest Age that can be called Minoan or Mycenaean.[6]

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[1] *To · a · po · lo · ni ·* | *to · a · mu · ko · lo · i ·* |

[2] *C. I. S.*, i, 86, A. l. 13. The Semitic dedication רשף מכל recurs in *C. I. S.*, i, 90, 91, 93, 94 at Idalion (see R. Hamilton Lang, *Narrative of Excavations in a Temple at Dali* (*Idalium*), *&c.*: *T. R. S. Lit.*, second series, vol. xi, Pt. I, pp. 33, 37; cf. Deecke-Collitz, *Sammlung der Gr. Dialektinschriften*, i, No. 597).

[3] Eutychius, *Annals* (ed. Selden, Oxford, 1658, i, p. 435). See on this curious history Alex. Enmann, *Kypros und der Ursprung des Aphroditekultus*, p. 37 and n. 3.

[4] See A. E., *The Tomb of the Double Axes*, *&c.*, *Archaeologia*, and cf. *P. of M.*, ii, Pt. II, pp. 279 and 285, Fig. 169.

[5] A specimen is in the Madrid Museum.

[6] Tsountas, indeed ('Εφ. 'Αρχ., 1891, p. 22), compares the very similar figure from Tiryns and Mycenae (*op. cit.*, Pl. II, 1 and 4*a*, 4*b*) with the warriors, with spears and small round shields, on a large fragment of a very early geometrical vase (Schliemann, *Tiryns*, Pl. XIV), but the comparison is wholly unwarranted. The one thing certain about these warriors is that they wear skins with long tails.

§ 88. Great 'East Hall' resuscitated.

Main approach to lower halls of 'Domestic Quarter' from above: its ground floor the piano nobile*; Somewhat lesser height of upper stories; the fourth landing, below level of Central Court; Flight of Stairs thence to roof terrace; Architectural analogies with West side of Court; Evidences of great 'East Hall'; Correspondence with ground plan of earlier 'East Hall' basements; These choked by Earthquake and subsequently filled in; M. M. III* a *relics of earlier Hall—including 'Ladies in Blue' fresco; Earlier East Hall narrower, with lateral light-area, N.; Break between M. M. III plan and M. M. II structures; Important relics found in Loom Weight area—M. M. II* b*; Restored plan of later 'East Hall'; Blocked doorway of filled-in Magazines; Earlier Hall approached by descending steps; New Hall and adjoining East façade in harmony with later façade West of Court; 'Stepped Porch' balanced by Stepped Portico of new 'East Hall'; Striking correspondence in levels and espacement with structures West of Court; Agreement between Steps of 'East Hall' and those of 'Stepped Porch'; Position of Columns in Portico; Lateral openings to landing: Doorways of East Hall; Central light-area of Hall evidenced by drain-head—course of drain to blind well; M. M. III* a *conduit re-adapted for later Hall; Evidence of use to L. M. II; Square central peristyle of later East Hall; Interior section, with side doors; Parallelism with plan of Mainland 'Megaron', but this Hall not isolated; Painted plaster high reliefs precipitated from Walls; Fragments thrown down at time of final Catastrophe; High reliefs, executed in the Great Transitional Age, preserved on Walls to the last.*

Main approach to lower halls from above.

It has been already observed that the main entrance of the Grand Staircase as an avenue of approach to the 'Domestic Quarter' was from above. This arrangement—conditioned in all cases by the cuttings into the hill-side, similar to the Great Cutting here—reappears in the Royal Villa,[1] as well as in the 'South-East'[2] and 'South House'.[3]

Ground floor of 'Domestic Quarter' *piano nobile.*

Though thus reached by descending flights of stairs, the ground floor was still the *piano nobile*, containing the principal reception rooms such as the 'Hall of the Double Axes' and the 'Queen's Megaron', nor was there in the case of the 'Domestic Quarter' any system of basements such as we find throughout the Western Section of the Palace.[4] Of the superior importance attaching to these lower palatial Halls, there is indeed a sufficient

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[1] *P. of M.*, ii, Pt. II, p. 396 seqq.

[2] *Ibid.*, ii, Pt. I, p. 299.

[3] *Ibid.*, ii, Pt. I, p. 373 seqq.

[4] There were basements, however, under

Somewhat lesser height of upper stories.

indication in the somewhat lower height of those of the two upper stories, accepting Mr. Christian Doll's revised view of the height of the corresponding flights of the Grand Staircase.

In view of the purely artificial support of the third and fourth flights by means of wooden beams and columns in place of the actual *terra firma* underlying the two lower flights, Mr. Doll has been led to the conclusion embodied in the Section (D) at the end of this Volume,[1] that flights 3 and 4 were laid at a lower slope.[2] According to this calculation these two flights would together have occupied a height of only 3·30 metres, in place of about 4·15, for the total height of the lowermost story.

Third landing below Court level.

As a consequence of this, the landing of the fourth flight would be brought down 80 centimetres below the level of the Central Court, which, according to the system as reconstructed, it actually reaches. In this case four steps [3] may have led down to the landing, traversing the two outer lines of wall, which, together, have a breadth of about a metre. This would have corresponded with the descent to the basements on the Western side of the Court by steps through the more widely espaced lines of outer walling.[4]

Flight of stairs to roof terrace.

From the fourth landing,[5] as shown in the Section of the Grand Staircase (D) at the end of this Volume, a similar flight—the fifth of the series—led to another landing, beyond which the system of ascent to the upper roof terrace somewhat changed. The turn Westwards from this fifth landing is shown to have consisted of four steps which are clearly marked by cuttings on the great stair-block, here raised into position, very careful drawings of which by Mr. Christian Doll are given in Fig. 336, A, B, C. Beyond these four steps, however, the passage-way, as is proved by the absence of step-marks on that side of the block (Fig. 336, B), did not at once ascend. The places of the steps in its further course must be fixed, as shown in Mr. Doll's Section (D), at the points where the great beams supported the gangway.

This further course North, though with a more widely espaced system of steps, rose to the same height as the fifth flight of stairs (1·65 metres), the

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part of the South House (*P. of M.*, ii, Pt. I, p. 380 seqq.). Its main entrance was probably from the terrace above on the Palace side.

[1] Compare, too, his section given on a smaller scale in *P. of M.*, i, p. 340, Fig. 247.

[2] Mr. Doll is of opinion that some of the step-marks on the side-blocks of the stairs corroborate the idea of a lower slope. His careful drawings of these will appear at the end of Vol. IV of the present work. The pavement level of the Hall of the Colonnades is approximately 8·25 metres.

[3] Four steps would give a rise of 20 cm. and a breadth of 25.

[4] The number of steps here was probably six, with less rise.

[5] A photographic view of this landing, as restored, with the two first steps of this flight, is given in Fig. 195, p. 300, above.

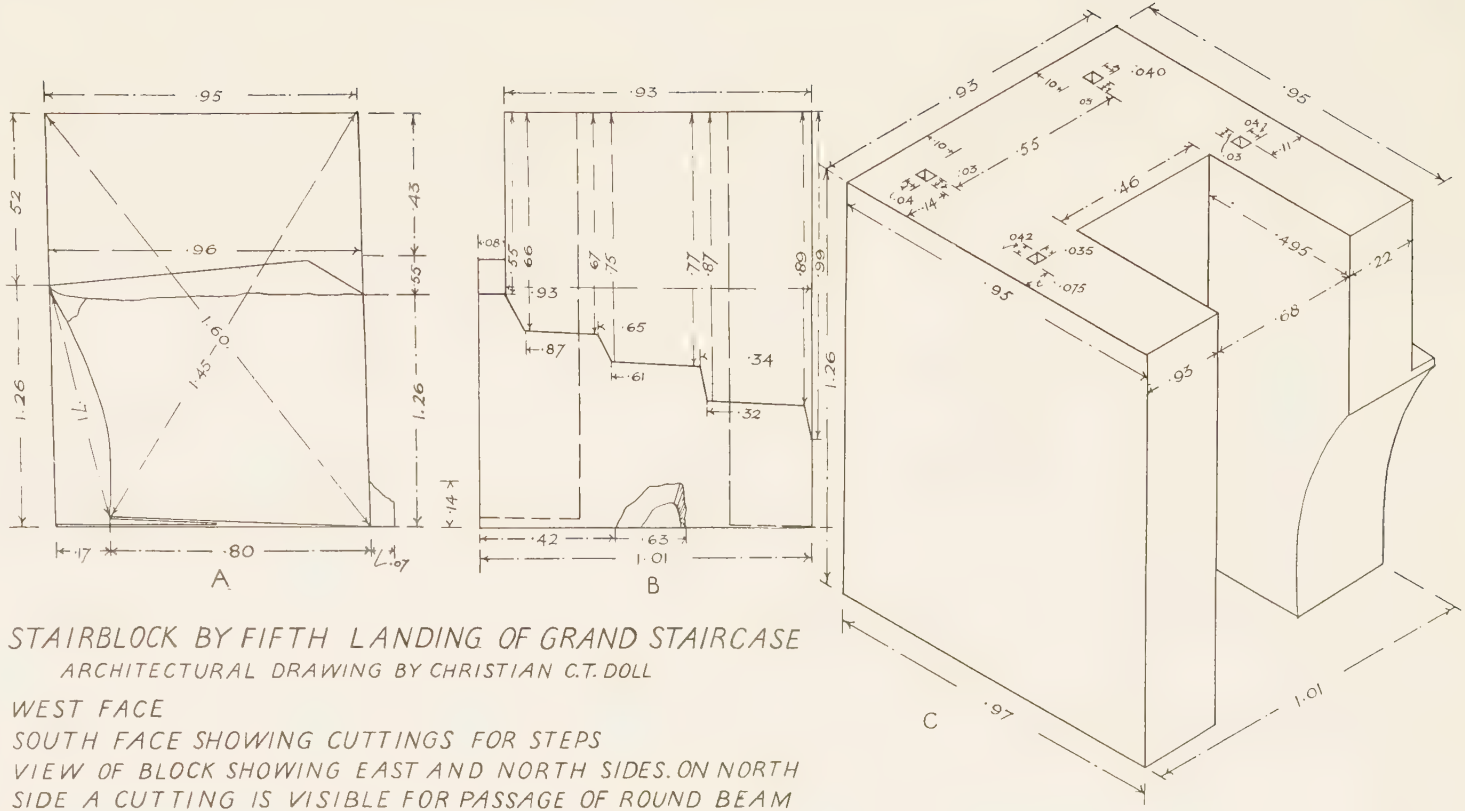
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Fig.336 STAIRBLOCK BY FIFTH LANDING OF GRAND STAIRCASE
ARCHITECTURAL DRAWING BY CHRISTIAN C.T. DOLL

A. WEST FACE
B. SOUTH FACE SHOWING CUTTINGS FOR STEPS
C. VIEW OF BLOCK SHOWING EAST AND NORTH SIDES. ON NORTH SIDE A CUTTING IS VISIBLE FOR PASSAGE OF ROUND BEAM

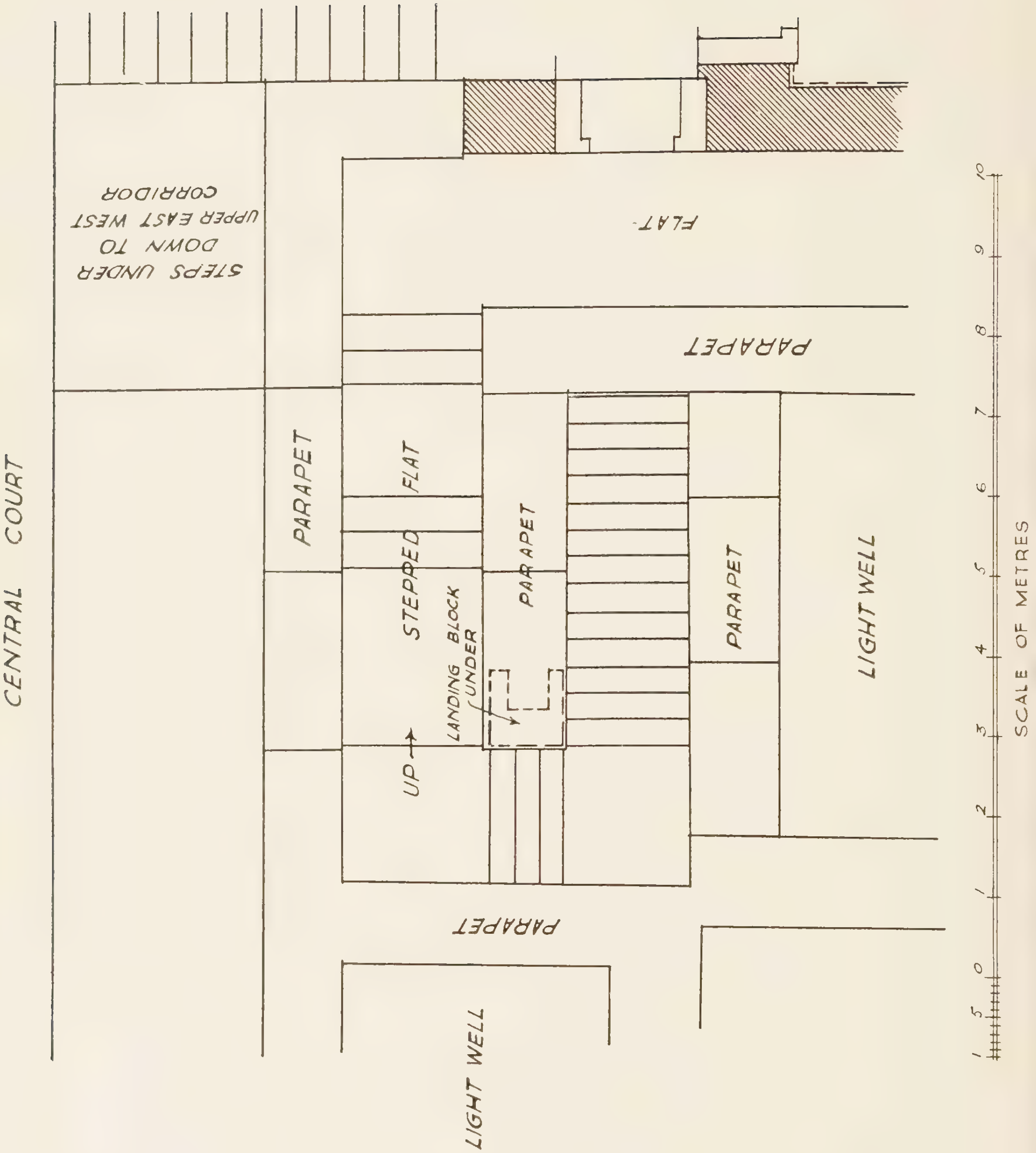
STEPS UNDER
DOWN TO
UPPER EAST WEST
CORRIDOR
FLAT
PARAPET
CENTRAL COURT
PARAPET
STEPPED FLAT
PARAPET
LANDING BLOCK UNDER
UP
PARAPET
LIGHT WELL
PARAPET
LIGHT WELL
SCALE OF METRES
1 5 0 1 2 3 4 5 6 7 8 9 10

Fig. 337. Plan of Uppermost System of Grand Staircase, showing Stepped Ascent to Roof-flat: Christian C. T. Doll.

level of the roof-flat thus reached being 3·30 metres above the fourth landing, thus allowing headroom for the entrance to it from the Central Court. The rising parapets that would have bordered the upper succession of steps must themselves necessarily have acted as supports for the post of some kind of wooden shelter which would have kept the rain from pouring down the stairs. A plan of the upper staircase system is given in Fig. 337. Immediately bordering the Grand Staircase on its North flank, there is convincing evidence of the existence of a great 'East Hall', which, from its surviving traces, must have stood forth as the most important of all the reception halls in the Palace area, even as the remains of its noble high reliefs represent the highest level ever attained by Minoan glyptic Art.

Architectural analogies with West side of Court.

Evidences of great 'East Hall'.

It seems largely to have corresponded with the structural features of an Earlier East Hall, many of the remains of which as relating to the 'pre-seismic' phases of M. M. III have been described in the first Volume of this work.[1] As will be seen from the plan here reproduced in Fig. 338, the 'Corridor of the Bays', belonging to this earlier structure, had originally opened from the second landing of the Grand Staircase, thus affording ready access from the central section of the Domestic Quarter to the adjoining store-cells and to the Magazine in which the remains of the 'Medallion Pithoi' were brought to light.

Correspondence with ground-plan of earlier E. Hall basements.

After the great Earthquake towards the close of M. M. III *b* there is abundant evidence of the earthing under of these once royal store-rooms, together with the adjacent basements. It is to be noted that in two of these, as indicated in the Plan, Fig. 338, high, beautifully veined breccia column-bases, remains of painted stucco reliefs of bull-grappling scenes, and the important 'Spiral Fresco'[2] were found in association with M. M. III *a* pottery. In addition to these there came to light, outside the North wall of the 'Magazine of the Medallion Pithoi', in the same M. M. III stratum, a heap of painted plaster a good deal smoke-stained, from which it was possible eventually to restore the beautiful design of the 'Ladies in Blue'.[3] This composition—which shows drawing of extraordinary delicacy (see p. 496, Fig. 341 A)—is paralleled by the still more fire-injured remains of frescoes identical in style and design, found beneath the later floor of the 'Corridor of the Procession'[4] and belonging to the same epoch. In low painted relief, again, the 'Jewel Fresco', derived from the earlier 'Tricolumnar Hall' in the West Section of the building, evidently belongs to the same general

Basements choked by earthquake.

M. M. III*a* relics covered in: including 'Ladies in Blue' fresco.

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[1] *P. of M.*, i, p. 251, Fig. 187 *b* (section): p. 369 seqq. and p. 383, Fig. 278, ground plan.

[2] *Ibid.*, i, p. 371, Fig. 269.

[3] *Ibid.*, i, p. 545 seqq. and Figs. 397, 398.

[4] *Ibid.*, ii, Pt. II, pp. 680, 681.

decorative scheme, which seems indeed to have left its mark throughout the whole of the Palace area[1] at the time of the Great Restoration about the beginning of the Third Middle Minoan Period. It will be seen from these various records of its adornment that the 'East Hall' as then built must itself have been of exceptional splendour.

Earlier Hall narrower with lateral light-area.

From the basement plan, of which a revised version is given in Fig. 338, it would appear that this older Hall had a somewhat narrower front than that which may be reasonably assigned to the later. It will be seen that the system of the 'Royal Magazines', including those containing the 'Medallion Pithoi' and the adjacent Corridor and Bays, is bordered on the North by what was really an outside wall, facing an open passage-way with a good early 'tarazza' paving, which, in fact, formed a narrow light-area on that side. We must suppose that the Hall—which would in this case have immediately overlaid this group of Magazines and which unlike the later 'East Hall' was approached from the Central Court by some steps down—was provided on its North flank by a columnar balustrade, overlooking the open area.

This arrangement, which breaks the symmetry of the basement plan, did not, however, interfere with the construction of a later Hall covering its whole area, and the higher position of which did away with the necessity of carving off a light-area on its flank, now covered in. The only difficulty that might have been caused as to the North stylobate of the central peristyle adopted in the Plan, Fig. 340, below, as possibly due to the somewhat too Northerly line of the wall facing the area, ceases to be valid, when it is remembered that substructures of the Early Palace façade line below were still in position to support the foundation pier of the central column of the peristyle on that side.

Break between M. M. III plan and M. M. II structures.

It is observable that between the wall-lines of the M. M. II Palace, traceable below, and the M. M. III plan there was—as is so frequently the case throughout the building—a certain break of continuity in the structural arrangement. It is another proof of the serious break in the history of the building that occurred at that epoch, and points to destructive forces perhaps even greater than the seismic overthrow of which we have evidence near the close of the Middle Minoan Age.

At the same time the stratification connected with the earlier structures here affords a sure basis for the chronological place of the Early M. M. III

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[1] Another piece was found North of the Palace, *ibid.*, ii, Pt. II, p. 681, Fig. 431. Some much burnt remains of the same kind also occurred somewhat North of the deposit of the 'Magazine of the Medallion Pithoi'.

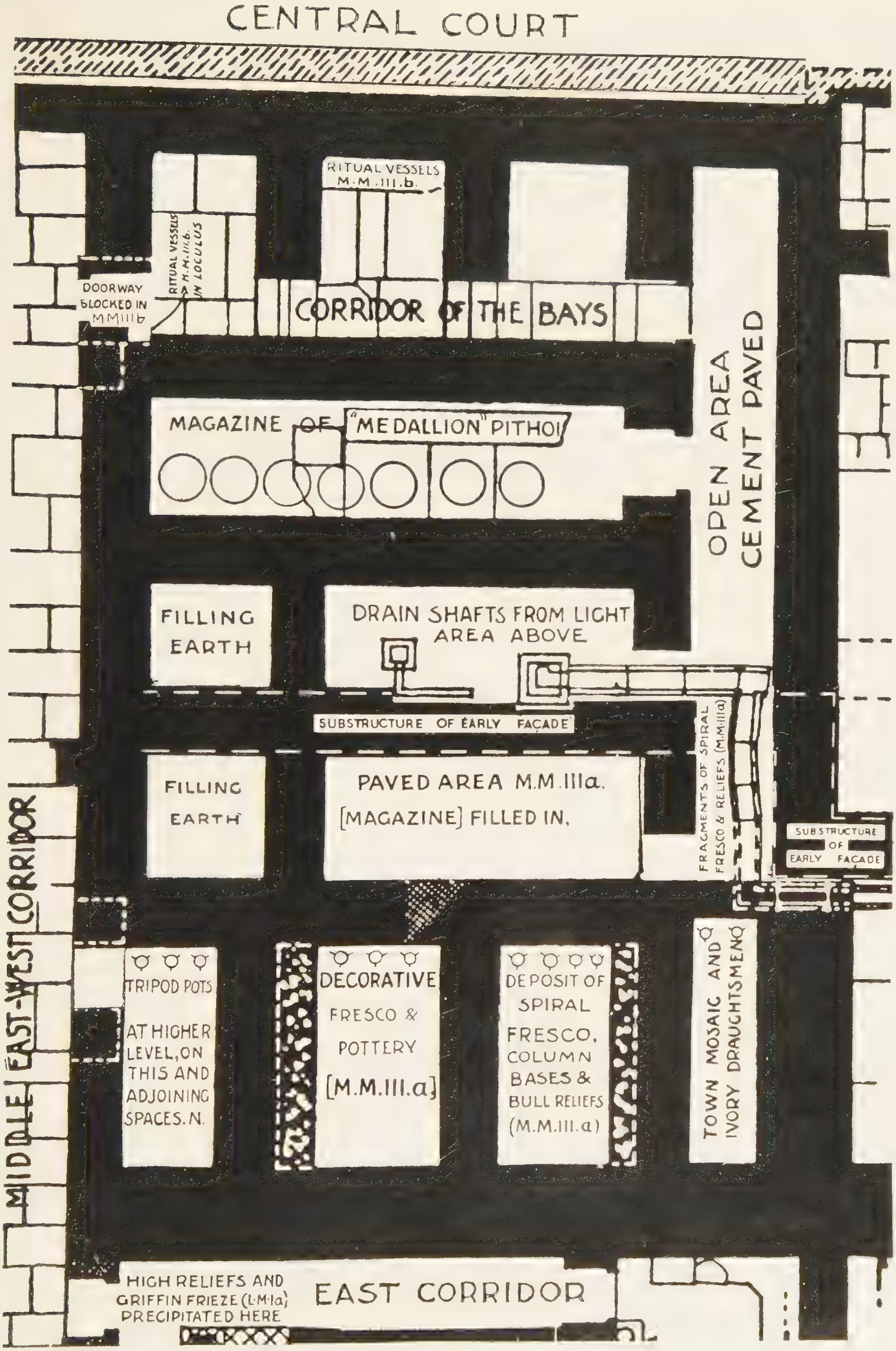
CENTRAL COURT
RITUAL VESSELS M.M.III.b.
RITUAL VESSELS M.M.III.b. IN LOCULUS
DOORWAY BLOCKED IN M.M.III.b
CORRIDOR OF THE BAYS
OPEN AREA CEMENT PAVED
MAGAZINE OF "MEDALLION" PITHOI
FILLING EARTH
DRAIN SHAFTS FROM LIGHT AREA ABOVE
SUBSTRUCTURE OF EARLY FAÇADE
FRAGMENTS OF SPIRAL FRESCO & RELIEFS (M.M.III.a)
FILLING EARTH
PAVED AREA M.M.III.a.
[MAGAZINE] FILLED IN.
SUBSTRUCTURE OF EARLY FAÇADE
MIDDLE EAST-WEST CORRIDOR
TRIPOD POTS AT HIGHER LEVEL, ON THIS AND ADJOINING SPACES. N.
DECORATIVE FRESCO & POTTERY [M.M.III.a]
DEPOSIT OF SPIRAL FRESCO, COLUMN BASES & BULL RELIEFS (M.M.III.a)
TOWN MOSAIC AND IVORY DRAUGHTSMEN
HIGH RELIEFS AND GRIFFIN FRIEZE (L.M.Ia) PRECIPITATED HERE
EAST CORRIDOR

Fig. 338. Basement Plan beneath 'East Hall' (revised). (Scale as Plan, Fig. 340, below.)

Important relics found in ‘Loom Weight Area’: M.M. II*b*.

Hall. In the Eastern part of its area the evidence supplied by these underlying remains, which belong to a terrace level below the still older façade line, was exceptionally rich. Beneath the ‘Loom Weight’ area, which this includes, lay the floor-level with a painted stucco chest and a raised dais supporting polychrome jars in the M. M. II *b* style, among them that depicting the inflorescent palm-trees.[1]

Restored plan of later E. Hall.

The restored plan of the later ‘East Hall’, as given in Fig. 340, is taken to have very closely followed that of its M. M. III *a* predecessor. Its basement spaces were filled in, and in this way the Magazines containing the remains of the magnificent ‘Medallion pithoi’ were covered over, as well as the ‘Corridor of the Bays’ that bordered them. As, however, the Grand Staircase, on the second landing of which this Gallery opened, continued to function, it was necessary to block the doorway abutting on it. It was, indeed, the breaking through of this rough stone blocking,[2]—accompanied by the clearance of the debris immediately beyond,—that first revealed the existence of an ascending and descending flight of stairs: the most dramatic moment of the Excavation.

Blocked doorway of filled-in magazines.

Whether or not a new basement Gallery was constructed above the old ‘Corridor of the Bays’, occupying the space between it and the threshold of the new ‘East Hall’ as built at a higher level, or whether this later floor-level was entirely underlaid by filling earth, it is difficult to say.[3] The whole of the upper fabric lying on the accentuated slope that marked the contour of the hill beyond the East border of the Central Court had either been entirely denuded away or its masonry plundered by those in search of building materials.

Earlier Hall approached by descending steps.

As already noted, the old ‘East Hall’ itself seems to have risen immediately above the roof level of the Corridor and adjacent Magazines, which,—assuming that the basements on this side were of the same height, *c.* 3·30 metres, as those of the West Palace Section—would have been exactly on a level with the fourth landing of the Grand Staircase according to the revised calculation given above. The earlier Hall would thus have been approached from the Central Court by descending steps through its double Eastern wall-line in the same way as the ‘Room of the Column Bases’ and the later ‘Room of the Throne' with its Antechamber on the Western border of the Court. The floor-levels, moreover, bordering it to North and South would in each case have corresponded, lying at a depth of about 80 centimetres below the paved surface of the Central Court.

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[1] See *P. of M.*, i, pp. 253, 254, and Fig. 190.

[2] Some fragmentary seal-impressions found in or under this blocking showed intaglio designs in a fine ‘transitional’ style. One of these, showing an acrobatic figure above a bull, is illustrated, *ibid.*, p. 686, Fig. 504, *d*. On and above the staircase landing beyond, seal-impressions occurred of the L. M. I *b* and L. M. II class.

[3] In Mr. Doll’s restored Section, at the end of this Volume, this basement is shown as open.

New Hall and E. façade in harmony with later W. façade.

According to the system of restoration adopted after the great catastrophe of the M. M. III Palace, the architectural plan that conditioned the setting out of the borders of the Central Court had undergone a revolutionary change. The whole Western façade had been moved forward so as to allow for a system of porticoes and balconies, as well as for a fine 'Stepped Porch' giving a direct and spacious access from the Court to the terrace level that formed the *piano nobile* on which were set the important halls of this Western quarter of the building.

'Stepped Porch' balanced by stepped portico of new E. Hall.

It may be taken for granted that the approach to the new 'Hall' built on the East side of the Court, facing the 'Stepped Porch' on the West, was not inferior to it in dignity, and, like the Western halls to which that Porch led, it must have been raised well above the level of the Court itself. Since, moreover, the revised level of the fourth landing of the 'Grand Staircase' corresponds with the level of the basement chambers West of the Court, there are strong *a priori* grounds for concluding that the roof-terrace level above and, with it, that of the floor of the new 'East Hall', corresponded with the terrace level of the *piano nobile* opposite.

But this *a priori* probability is supported in a remarkable manner by certain features in the basement plan (Fig. 338) that supplies the basis for the restoration of the Great Hall on the East side of the Court.

Striking correspondence in levels and espacement with structure W. of Court.

On examining the plan it will be seen that, assuming that there was a rising flight of steps in front of the Hall, the natural place for the steps to break off is above the line given by the inner or Western end of the walls of the row of bays that flank the Corridor. But the distance of this line from the border of the Central Court is 4·50 metres, which exactly corresponds with that between the Western border of the Court and the landing of the reconstituted stairs of the 'Stepped Porch'.

Agreement between steps of Portico East with 'Stepped Porch'.

The number of the steps in that case was twelve, with a tread in each case of 40 centimetres and a rise of about 20 cm. The height therefore of the landing of the 'Stepped Porch' was 2·50 metres above the pavement of the Court and 3·30 m. above the original basement level below. These measurements correspond absolutely with the results arrived at *ex hypothesi* in the case of the landing of the steps of the Great East Hall, in correspondence with the height of the adjoining roof terrace. This, according to the revised evidence regarding the height of the fourth landing of the

'Grand Staircase', was 3·30 metres above it or about 2·50 metres above the level of the adjoining pavement of the Central Court.

For purposes of comparison a section of the 'Stepped Porch' as reconstituted is given in Fig. 339.

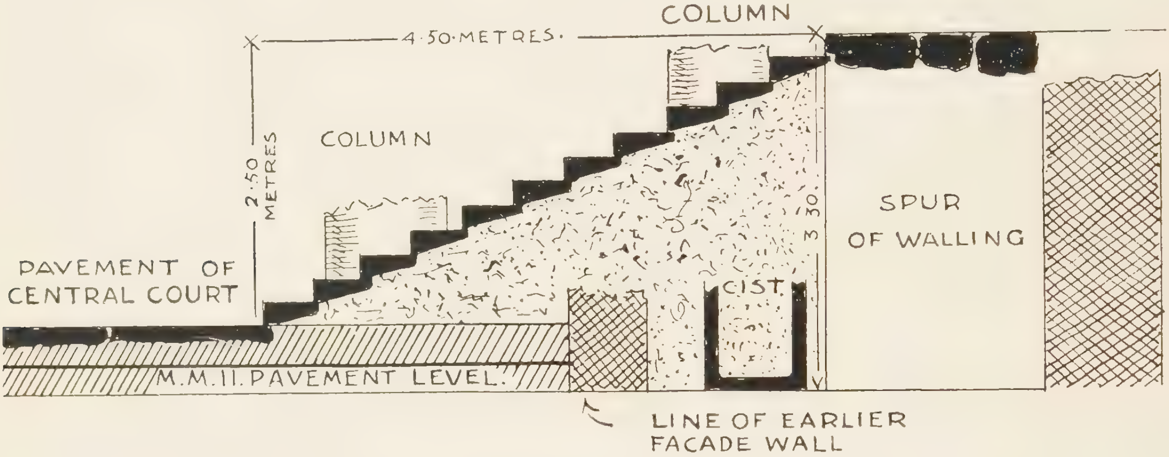

FIG. 339. SECTION OF 'STEPPED PORCH', WEST OF THE CENTRAL COURT.

It will be seen therefore that, as placed in its most probable position with regard to the evidence of the existing supports below, both the height of the landing of the portico of the East Hall and its espacement from the edge of the pavement of the Court exactly agree with the results arrived at in the case of the 'Stepped Porch' opposite.

Position of columns.

It seems unnecessary to suppose that the exceptional arrangement of a lower and an upper column exemplified by the 'Stepped Porch' was here followed. The triple columnar system indicated by the three supporting 'spurs' of wall might have been effectively carried out by means of three columns running along a middle line between the foot and the landing of the steps as shown in the restored plan, Fig. 340, and this would have been sufficient to support the entablature of the portico. The base of the columns in this case might have been placed in the space filled by the 6th, 7th, and 8th step in the same way as the lower base of the column of the 'Stepped Porch' is placed in the space occupied by the 2nd, 3rd, and 4th step.

The diameter of the lower column-base of the 'Stepped Porch'—1·20 metres—may be taken as an approximate guide for that of the three columns of the Portico, which would have been of exceptional height. It seems probable that, so far as they were sheltered by the entablature, the side walls of this Portico were adorned with painted reliefs above a dado.

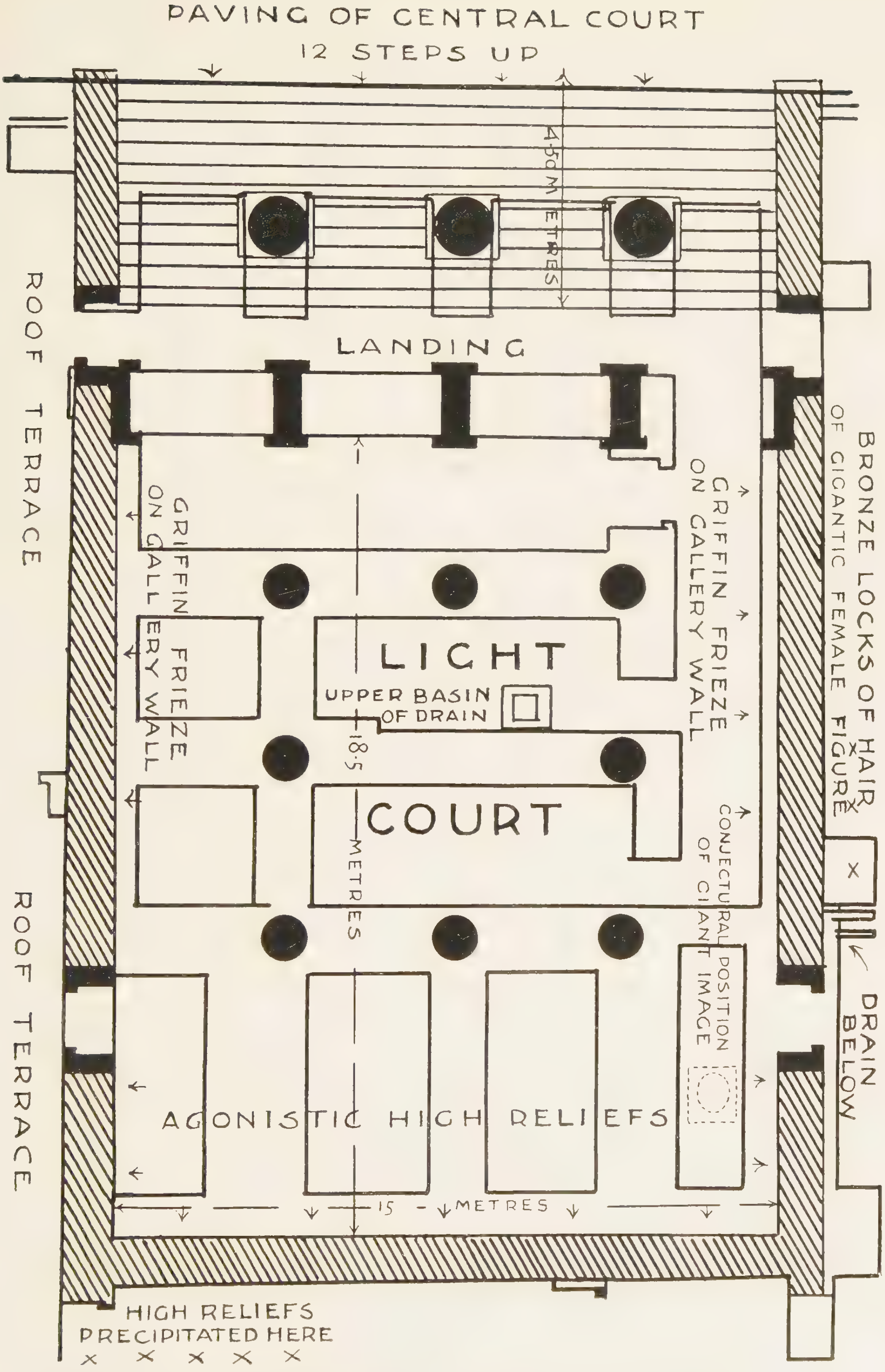
PAVING OF CENTRAL COURT
12 STEPS UP
4·50 METRES
LANDING
ROOF TERRACE
GRIFFIN FRIEZE ON GALLERY WALL
GRIFFIN FRIEZE ON GALLERY WALL
BRONZE LOCKS OF HAIR OF GIGANTIC FEMALE FIGURE
LIGHT
UPPER BASIN OF DRAIN
18·5 METRES
COURT
CONJECTURAL POSITION OF GIANT IMAGE
DRAIN BELOW
ROOF TERRACE
AGONISTIC HIGH RELIEFS
15 METRES
HIGH RELIEFS PRECIPITATED HERE

Fig. 340. Conjectural Plan of Great ‘East Hall’ as restored in M. M. III *b*.

Lateral openings to landing.

From the top of the steps the depth of the landing is conditioned by that of the 'Corridor of the Bays' below, giving a space of about a metre. We may infer by analogy that it had two lateral doorways, that to the South opening on the roof terrace overlying the 'Domestic Quarter'. By this door direct access would be gained to the point where the topmost flight of the 'Grand Staircase' emerged on this level. Its opening was certainly protected from the elements by some kind of roof pavilion, the shelter of which would have extended to the landing of the 'East Hall'. It would thus have been possible by this route to reach the great Halls of the adjoining section entirely under cover.

Doorways of the E. Hall.

The West wall of the 'Magazine of the Medallion Pithoi' clearly supplies the line of support for the door openings leading into the interior of the East Hall. In conformity with the general plan, these were presumably four in number, with wide openings answering in position to the intercolumniations of the Portico. These openings must be supposed to have had two-leaved doors, like those of the 'Hall of the Double Axes'.

Central light-area of Hall evidenced by drain head.

With regard to the architectural arrangement of the interior of the Hall some direct evidence is forthcoming. We have proof of a drain-shaft running up near the middle of the interior, which shows that there had been here a small light-area. It has already been pointed out that the earlier structures in this section of the basement plan, Fig. 338, are quite consistent with the idea that there had been here a peristyle surrounding a small square Court.

At the point indicated on the basement level, and set against the inner side of the substructures of the early façade wall, a square limestone basin came to light opening into the section of a conduit of the same material, which was at first taken to be part of an 'olive-press'.[1] That it was the base of an ascending drain-shaft serving a light-court above has long been recognized.[2]

Course of drain to blind well.

The stone conduit itself with which this is provided, after passing through an opening—perhaps expressly made for it—in the neighbouring wall a little to the North of it, runs straight towards the further wall of the adjoining open basement area, as if it had been intended to prolong its course in that direction. Instead of this, however, it turns at this point by a sharp angle towards the early North-East Portico, from which, as already shown, it made its way by a vertical descent down the terrace wall and,

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[1] See *Knossos, Report*, 1901, pp. 82, 83.

[2] A little South of it, as shown in the Plan, Fig. 341, is another smaller basin of terra-cotta communicating with a pipe of the same material. This may be of earlier date than the other, but what restricted function of drainage it may have served it is impossible now to determine.

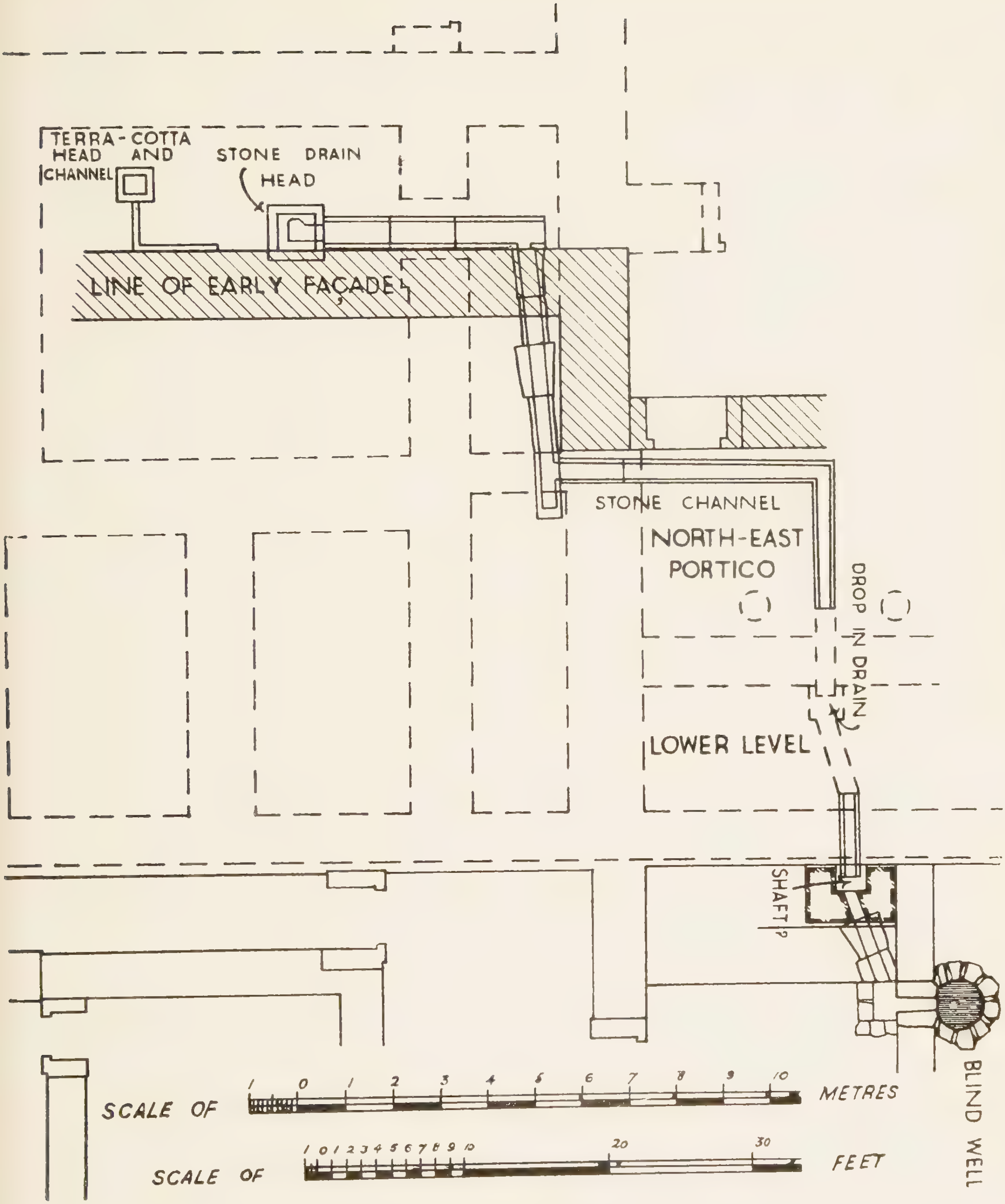
TERRA-COTTA HEAD AND CHANNEL
STONE DRAIN HEAD
LINE OF EARLY FAÇADE
STONE CHANNEL
NORTH-EAST PORTICO
DROP IN DRAIN
LOWER LEVEL
SHAFT?
BLIND WELL
SCALE OF
1 0 1 2 3 4 5 6 7 8 9 10
METRES
SCALE OF
1 0 1 2 3 4 5 6 7 8 9 10 20 30
FEET

Fig. 341. Plan showing Course of Stone Conduit from Drain-head of Shaft to ‘Court of Stone Spout’.

across an adjoining space, to the projecting spout in the wall overlooking the little Court named after it and thence to the neighbouring blind well (see Plan, Fig. 341).[1]

The evidence at our disposal leads to the conclusion that the stone conduit in its original shape goes back to the early part of the Third Middle Minoan Period. The wall of which the spout forms an integral part has already been shown, from its construction and the character of the signs that it presents, to belong to the same M. M. III *a* date as those of the light-courts of the 'Domestic Quarter'. So, too, the sherds found in the blind well and brought down by the drain from the area that it served above include parts of vases belonging to the same early phase of M. M. III *a*, though in the other direction the various ceramic styles are represented down to the last Palatial epoch L. M. II.

M. M. III *a* conduit readapted for later Hall.

This points to the more or less continuous usage of the conduit, but, at the same time, the anomalies displayed by the first section, leading from the stone drain-head, may suggest that the drain had originally been devised to serve the light-area flanking the M. M. III *a* East Hall on the North. On the other hand, the stone basin in the position in which it was found clearly formed the base of a shaft running up to the central open space of the later Hall. It represents, therefore, a later adaptation of the old drainage system, when the earlier light-area had gone out of use. That such an adaptation had taken place is, indeed, the necessary conclusion to be drawn from the fact that, not only did the upper deposit of the blind well contain L. M. I and L. M. II pottery, but, in sections of the conduit explored under the floor of the North-East Portico, several fragments of pottery occurred belonging to the last Palace period, including a large part of a pedestalled goblet with a painted decoration illustrating the very last palatial style.[2] We have here, indeed, a valuable indication that the Hall above had continued in use up to the moment of the final overthrow.

Evidence of use to L. M. II.

Square central peristyle of later E. Hall.

The drain-shaft must have run up near the North-West Corner of the open area of this later Hall. The sub-structures of the borders of this Court fit in, as already observed, with the idea that it formed a small square of about four and a half metres, surrounded by a peristyle consisting of eight columns, like that of the 'Little Palace'. The covered area of the front portico and side galleries of this would have been about 2·30 metres wide within the line of the columns, while the back section—by far the most important—was 5 metres deep.

The whole interior of the Hall, including the 'impluvium', was as nearly as possible 18·5 metres from East to West, where was the line of doorways, by 15 from North to South—occupying an area, that is, of 277·5 square metres.

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[1] Reproduced from *P. of M.*, i, p. 381, Fig. 276.

[2] See Vol. iv.

Interior section with side doors.

That there were door openings in the two side walls of the interior section may be inferred from the general planning of the chief Minoan Halls, which were not isolated like the typical Mainland examples. It seems probable that the South-East door gave on a roof terrace. By means of the window-like openings above its two doors the interior section of the Hall would be well lighted.

Parallelism with Mainland plan; but not isolated.

Apart from this facility of communication afforded by the doors that we must assume to have existed in the inner section, the arrangement of the Hall with its central light-area shows a close analogy with the Mainland type of Megaron as seen at Tiryns and Mycenae, except that in this more glorified example there were eight columns.

It is clear that the great scheme of plastic decoration connected, as we shall see, with the later East Hall and executed, therefore, about the beginning of the New Era, must have found the finest field for its exhibition on the back wall of this inmost section.

Discovery of Fallen Remains of Painted Stucco Reliefs.

Painted plaster high reliefs precipitated from walls.

A mass of painted stucco fragments, chiefly consisting of high reliefs, were in fact found in a space immediately below the South-East Corner of this back section of the Hall. These remains came out—not more than a metre below the surface of the slope at this point—just outside the Northern border of the later 'East Stairs'. They lay in the upper part of the fallen deposit that had filled the inner part of the 'Lobby of the Wooden Posts'. Most of the fragments covered a small area, about on a level with the base of the Upper Story block that was found here *in situ* only slightly sunken beneath its original level, and corresponding with another balustrade block below.

Fragments thrown down at time of final catastrophe.

A special interest attaches to the circumstances of the discovery, since they afford clear evidence that the stucco fragments had been precipitated from above at the time of the final catastrophe of the Palace. That the fall had taken place at this late date is shown by the fact that it blocked the upper part of a passage-way—the Northern continuation of the 'East-West Corridor'—that had remained in use till the end of L. M. II. The stairs, moreover, on the border of which the deposit lay and which must have been already in existence when the fragments found their way there, were, as has been shown, themselves not earlier than the latter part of L. M. I *a*. These had been partially ruined at the time when the stucco reliefs had fallen into their well.

High reliefs of Great Age preserved on walls to the last.

All this points clearly to the conclusion that the noble high reliefs and the other elements of plastic decoration of which the *disjecta membra* were here brought to light, had remained on the walls of the great 'East Hall' to the last days of the Palace. That these represent the highest attainment of Minoan Art, that marks the closing phase of the Third Middle Minoan Period and the earliest work of the Great Restoration, cannot be doubted. The durable texture of these plaster reliefs, which in this respect may be compared with the Italian *gesso duro*, makes it quite intelligible that they may have retained their places on the walls for several generations. The general principle, indeed, has been laid down above that painted stucco decoration on walls as a rule goes back to an earlier date than the actual floor deposits found in connexion with it. In the present case the weathered condition of some of the reliefs may perhaps be the result of their long exposure beneath the porticoes of the Hall.

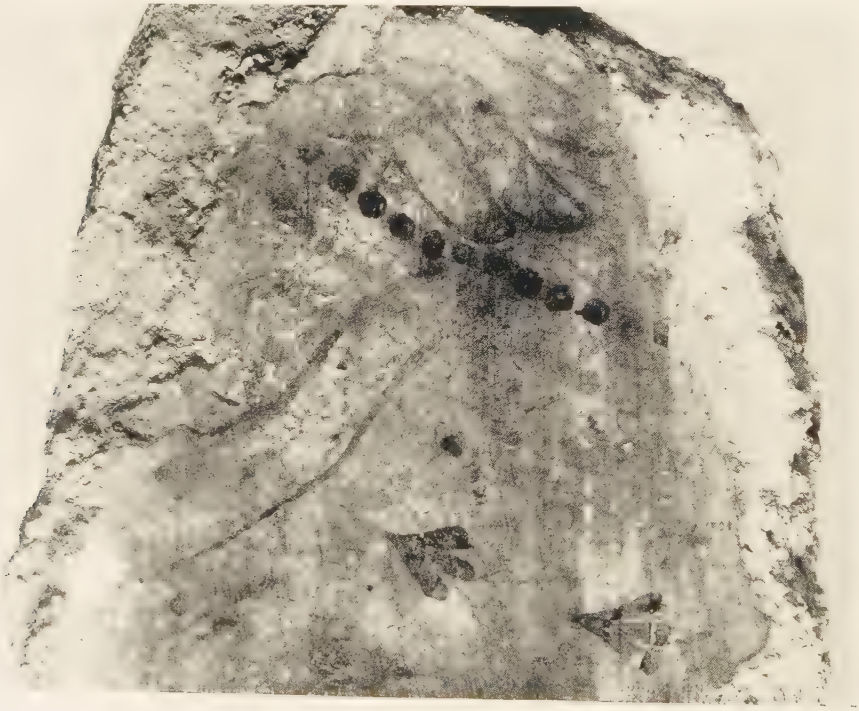

FIG. 341 A. HAND SLIGHTLY UNDER LIFE SIZE, FROM 'LADIES IN BLUE' FRESCO.

§ 89. The Painted High Reliefs from East Hall; and Bronze Locks of Hair from Gigantesque Female Image.

Agonistic and acrobatic character of High Reliefs; Fragment from group of two wrestlers—Sir W. Richmond's technical appreciation; Boxing bouts and hand-to-hand encounters in Minoan Art; Upper arm—attributed to fallen pugilist; Comparison with small relief of H. Triada 'rhyton'; Forearm of boxer; Forearm of Taureador, with clenched fist—Sir W. Richmond on this; Hand, with careful rendering of veins; Leg seen from back, perhaps of pugilist; Calf in profile and ankle-ring; Female breasts—probably of Taureador; Fragments of frieze with opposed Griffins tethered to Columns; Palm Columns; Cornice with triple gradation beneath Griffin Frieze; Opposed Griffins compared with signet-type; Column here baetylic form of divinity; Oriental origin of such 'antithetic' schemes; Frequency of opposed animal types in Late Minoan Art; High reliefs probably on walls of back Section of Hall; Double tiers of reliefs; Griffin Friezes along side walls in narrower porticoes; High reliefs evolved from lower; Gypsum reliefs at Mycenae—by Minoan hand; Concurrent progress of works in the round; Hand of stone figure, half natural size; Life-sized female head in painted stucco, from Mycenae; Influence of wood carving visible in head; Discovery of large bronze locks of hair in carbonized deposit by N. wall of East Hall; Belong to wooden figure of gigantic proportions; Female sex indicated; The 'Xoana' of Daedalos; A gigantesque cult image of Minoan Goddess; Probable place, in back Section of Hall.

Agonistic and acrobatic character of high reliefs.

The remains of high reliefs found in the deposit almost all relate to human subjects, and mostly belong either to the agonistic class concerned with boxers or wrestlers or to bull-grappling scenes.

Fragment from groups of wrestlers

Among the fragments discovered that reproduced in Fig. 342 A is of special interest in supplying an indication of the gymnastic character of the group to which it belonged. It consists of the front or outer side of a man's right shoulder with part of the breast. Below the armpit appears the tip of a thumb, seen in profile, which, from its position, may be taken to belong to the right hand of a second figure, grappling that to which the shoulder forms part. Evidently the other fingers gripped the arm just below this. We have here, then, a fragment of a group of two wrestlers.[1]

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[1] In order to obtain materials for a correct appreciation of this remarkable series of works I submitted some of the principal fragments to experts both on the artistic and

The horizontal section, Fig. 342 B, shows the contour of the relief above the plane from which it rises. In this, as in most of the fragments from this deposit, the red surface colouring—a good deal of which was here well preserved—indicates the male sex of the figure. The forms are muscular, 'the surface over the deltoid muscle of the shoulder, which is mainly concerned with raising the arm, suggests a powerful contraction of the anterior fascicule'. 'No one', writes Sir William Richmond, 'but a keen observer would have recorded the pressure from a hand under the biceps in throwing it up above the adjacent planes. One is reminded of the finer portions of the Pan-Athenaic frieze in this noble example of relief treatment. Probably only a highly trained eye is capable of appreciating the delicacy as well as the grandeur of the modelling in this fine fragment!'

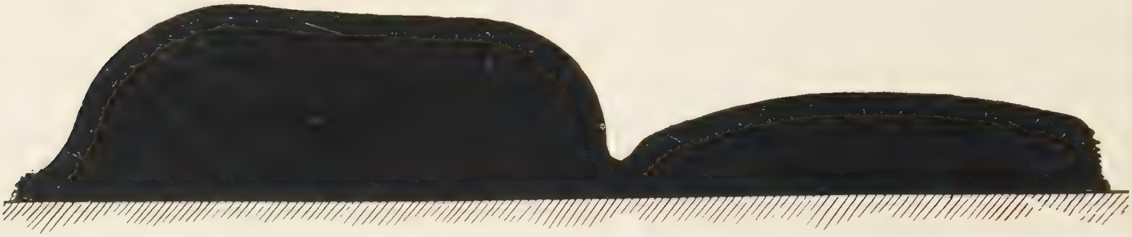

FIG. 342 B. HORIZONTAL SECTION (AS MARKED IN FIG. 342 A) OF MALE UPPER ARM AND BREAST.

Sir W. Richmond's technical appreciation.

Many of the fragments are of too incomplete a character to throw any definite light on the episodes to which they belong, except so far as the violent muscular action that they display shows them to have formed part of agonistic encounters of one kind or another.

Boxing bouts in Minoan small reliefs.

Apart from the bull-grappling scenes, the more usual class of athletic contests seen in Minoan small reliefs and signet-types relates rather to boxing bouts. The violent way in which the defeated competitor is thrown over—often with legs in the air—conveys at first sight, indeed, the idea of one thrown in a wrestling match. Good examples of this are given on the steatite 'rhyton' already illustrated,[1] from Hagia Triada, but in such cases the attitude of the victor, with his clenched fists outstretched,

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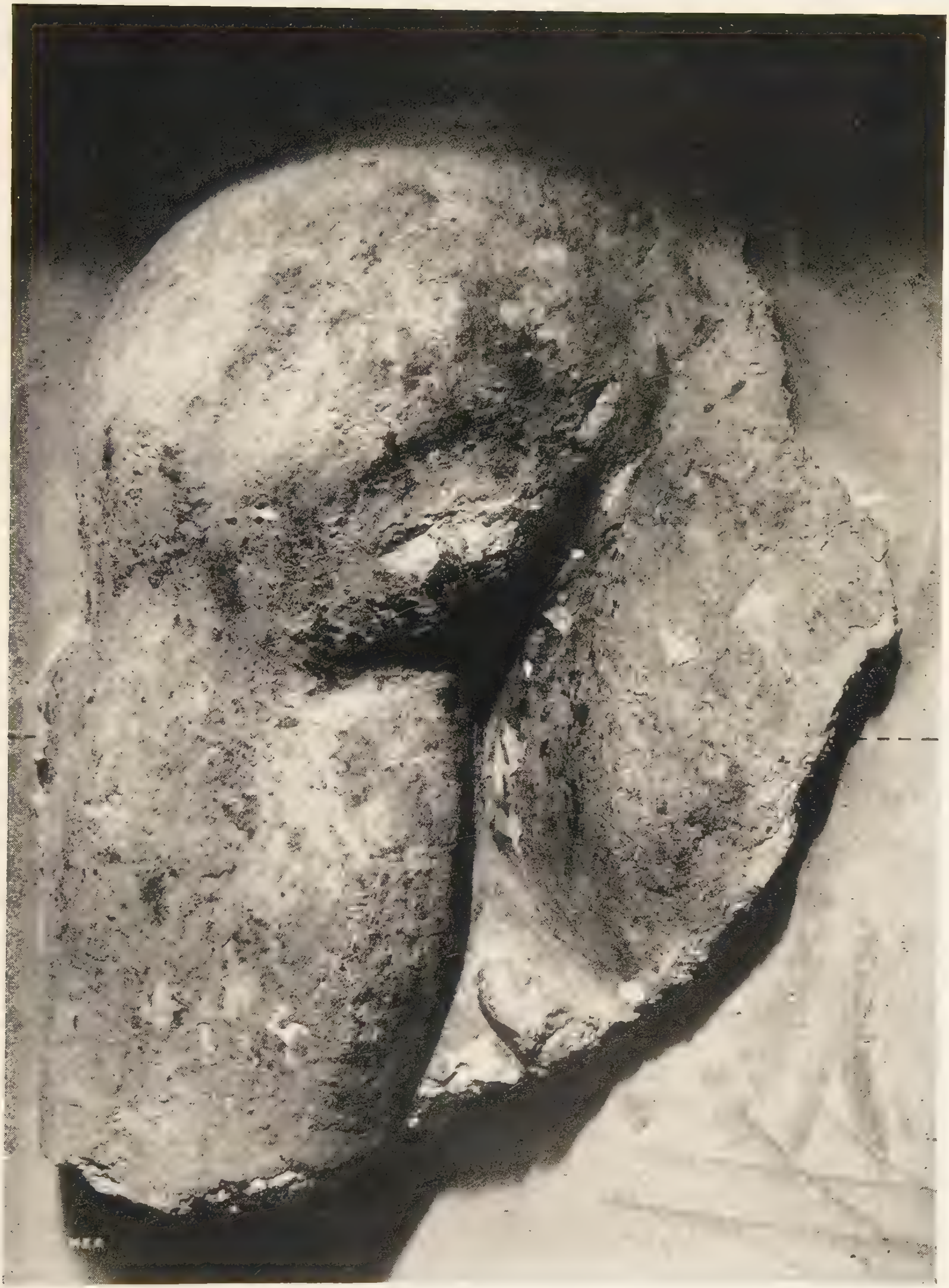
physiological side. Notes on these were kindly supplied me by Sir William B. Richmond, R.A., particularly distinguished for his technical knowledge, and whose works cover the domain both of painting and sculpture, and by Professor Arthur Thomson, F.R.C.S., Professor of Human Anatomy in the University of Oxford, whose *Handbook of Anatomy for Art Students* is a gauge of his special competency in the present connexion.

[1] *P. of M.*, i, p. 690, Fig. 511 (cf. F. Halbherr, *Memorie dell' Istituto Lombardo di Scienze e Lettere*, vol. xx, Pl. II, Fig. 3).



Section.

Fig. 312 a. Upper Arm and Breast of Athlete grappled by Another Man whose Finger-tip is visible near the Biceps.

leaves no doubt as to the pugilistic character of the encounter. Sometimes, indeed, we see clear traces of a *cestus* and boxing gloves.

Hand-to-hand encounters.

There are cases, again, of actual combat in which a victorious warrior, having dashed aside his opponent's weapon, seizes him by his head and pulls him over. A very spirited clay seal-impression from Hagia Triada gives a good idea of such a hand-to-hand encounter (Fig. 344).[1]

Upper arm: attributed to overthrown pugilist.

It is possible, indeed, that in the fragment, of which the photographic presentment is given opposite in Fig. 345, we have part of one of the typical figures of the vanquished in a boxing match of which examples are to be found both in 'rhyton' reliefs and intaglio designs.

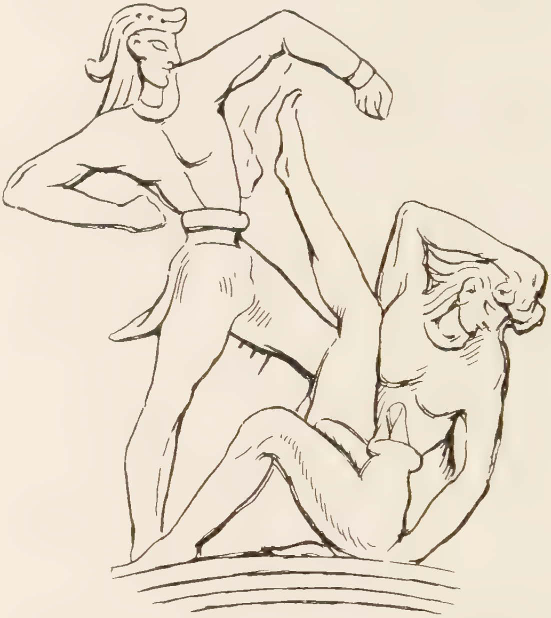


Fig. 343. Boxer knocked out. H. Triada 'Rhyton'.

Comparison with small relief of Hagia Triada 'rhyton'.

The remains of this stucco high relief consist of a part of a man's upper right arm with the left shoulder pushed up and the biceps in high action. The protrusion of the muscle due to the tensity of the strain is quite abnormal, and points to specialized athletic training.

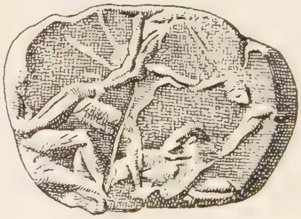


Fig. 344. Clay Sealing from H. Triada showing Hand-to-hand Fight.

It will be seen that the violent pushing up of the right shoulder, recognized by anatomists in this relief, is a feature in the action of the fallen pugilist reproduced in Fig. 343 from a zone of the Hagia Triada 'rhyton', who seeks, by the aid of his left arm, to prevent himself from rolling completely over owing to the force with which his opponent has struck him. This episode of the boxing ring, as has already been pointed out,[2] is taken over, together with other features, by the more martially inspired Art of the Mainland Minoan branch in the illustration of the scene of armed combat on a gold signet-ring from the Fourth Shaft Grave at

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[1] From Dr. Doro Levi's useful supplementary work, *Le Cretule di Haghia Triada e di Zakro*, p. 57, Fig. 130 (*Ann. della r. Scuola Archeologica di Atene*, vol. viii–ix, 1929, p. 123).

[2] *P. of M.*, i, pp. 690–3.

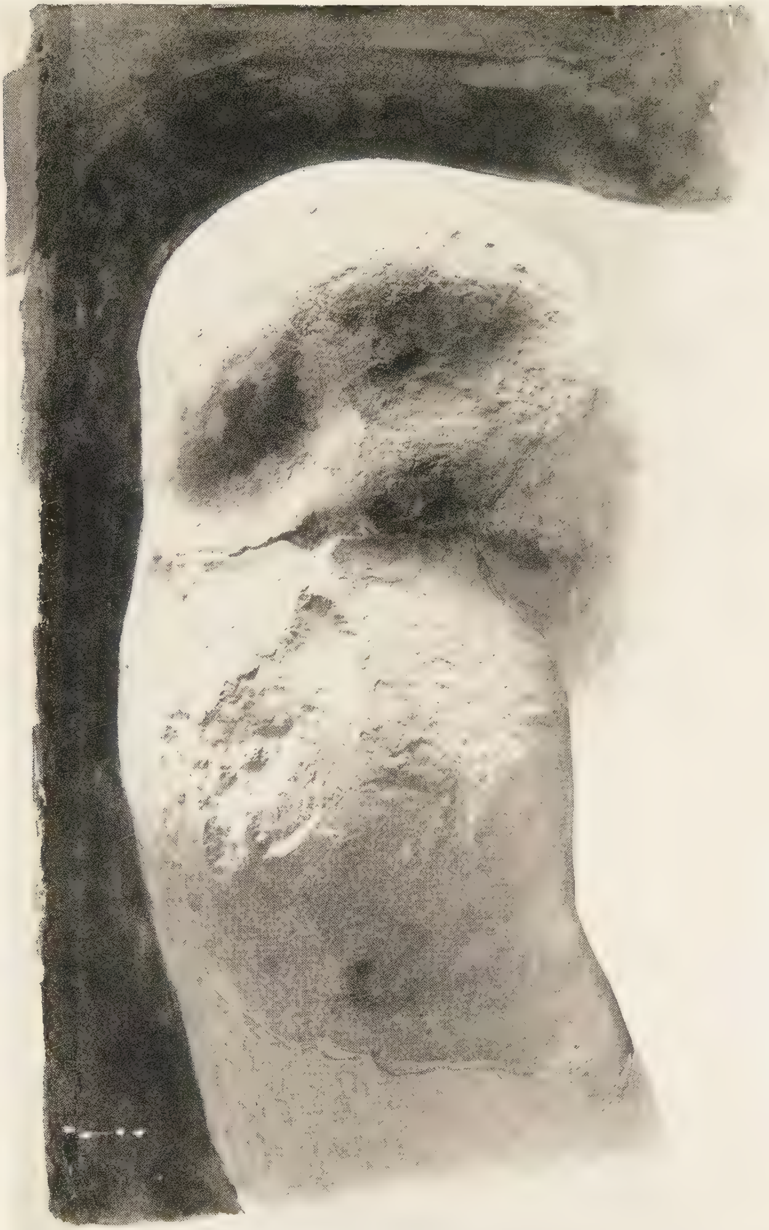

Fig. 345. Upper Arm of Man with Shoulder slightly pushed up and Tense Muscular Action. (*c.* $\frac{1}{2}$)

Mycenae,[1] Fig. 346. A similar motive occurs, indeed, on a seal-impression from Hagia Triada (Fig. 347),[2] in connexion with what, from the insertion of a theatral column, appears to have been some kind of gladiatorial contest, the fallen champion in this case resting on his left arm. It is the same motive, which—as recorded at a much later date by Pergamene Art—is familiar to the world in 'the dying Gaul'.

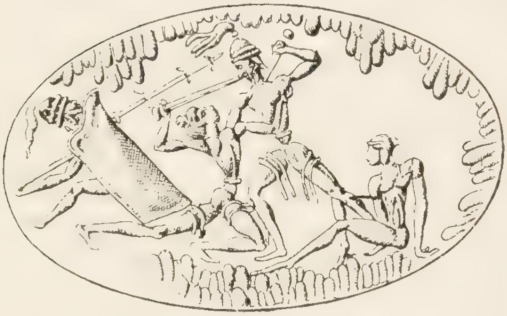

FIG. 346. ARMED COMBAT IN MOUNTAIN GLEN: GOLD SIGNET FROM IVTH SHAFT GRAVE, MYCENAE. ($\frac{2}{1}$)

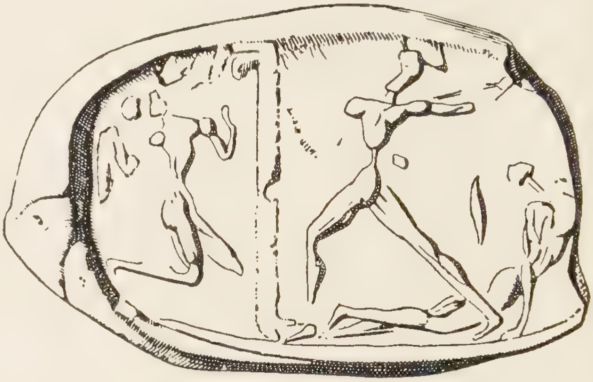

FIG. 347. SCENE OF GLADIATORIAL COMBAT IN ARENA: CLAY SEALING, H. TRIADA. ($\frac{3}{2}$)

Forearm of boxer.

The extraordinarily forceful fragment Fig. 348 A, may also belong to a pugilistic scene. It consists of the outer side of the left right elbow and upper half of the forearm, strongly bent and with the biceps exceptionally prominent, as will be seen from the section, Fig. 348 B. 'The disposition and form of the olecranon process of the ulna and the external condyle of the humerus are rendered with wonderful correctness.'[3] From the angular position in which the arm is held it looks as if we have to do with the action, so constantly depicted in the case of Minoan boxers, in which one arm is drawn

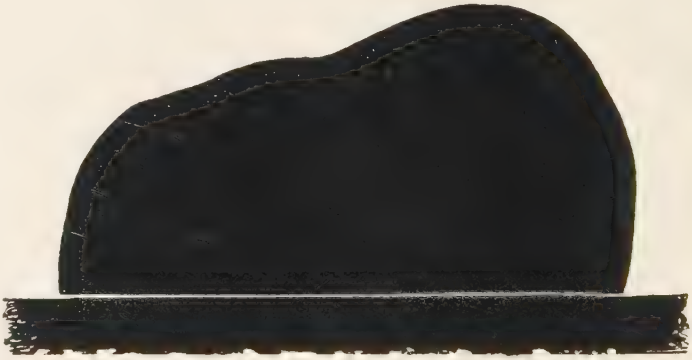

FIG. 348 B. SECTION ACROSS BICEPS OF MAN'S ARM SHOWN IN FIG. 348 A.

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[1] Reproduced from *P. of M.*, i. p. 691, Fig. 513.

[2] Halbherr, *Mon. Ant.*, xiii, p. 45, Fig. 41, and Pl. II. See, too, *P. of M.*, i, p. 691, Fig. 512, here reproduced.

[3] Note by Professor Arthur Thomson.

back strongly bent, as if to lunge forward the clenched fist at the opponent's body, while the other arm is held forward to parry a blow (see Fig. 343).[1]

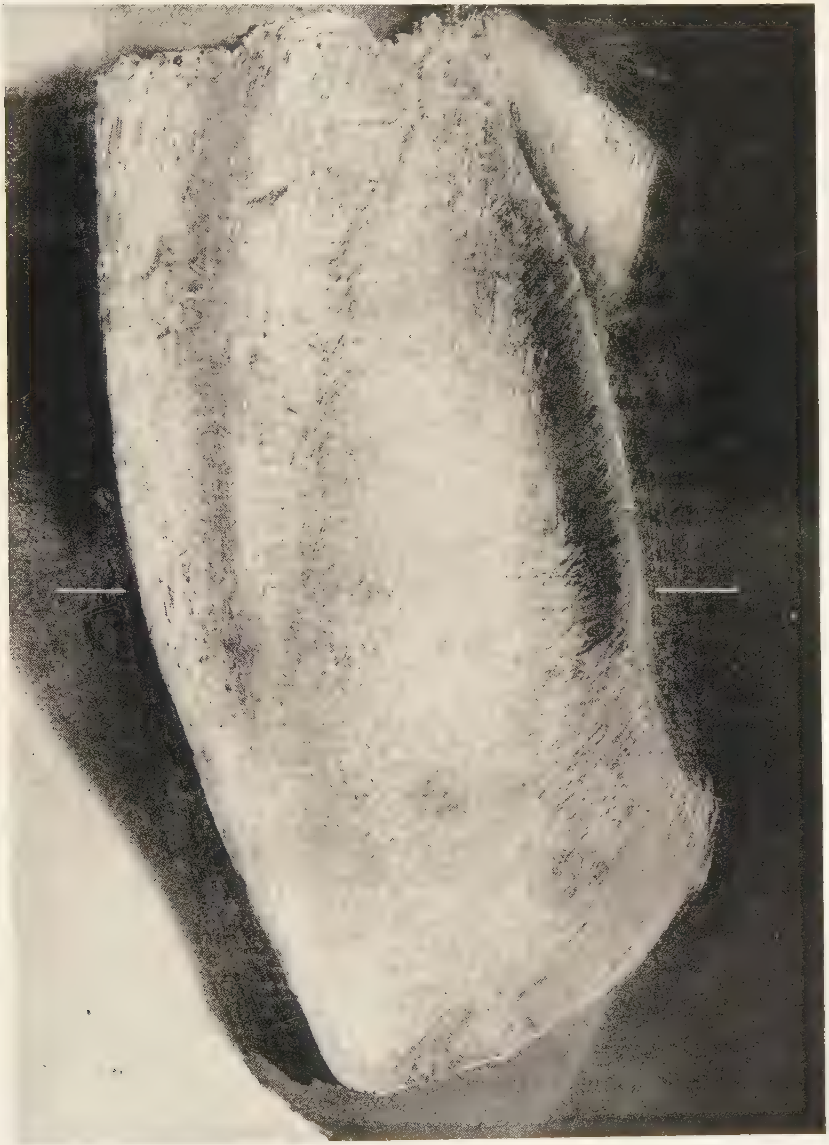

FIG. 348 A. BENT ELBOW AND MAN'S UPPER ARM, WITH EXCEPTIONALLY PROMINENT BICEPS. (*c.* $\frac{2}{3}$)

The action is well shown on a clay seal-impression from the Temple Repositories reproduced in Fig. 349,[1] and recurs on the fragment of a steatite 'rhyton' found on the North-East of the Palace site.[2]

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[1] This action is repeated in the case of a succession of boxers on the same zone of the Hagia Triada 'rhyton' from which Fig. 343 is taken. A fragment of a Knossian 'Miniature Fresco', Fig. 17, *c*, p. 35 above, has been restored in accordance with these designs.

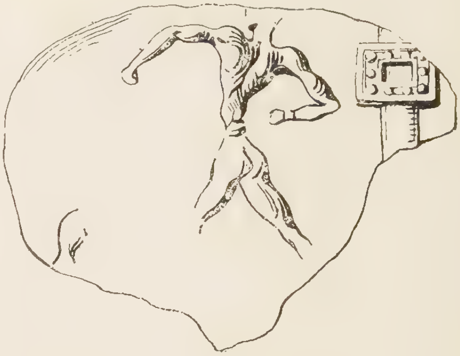

Fig. 349. Pugilist who has overthrown Rival Champion: behind, 'Theatral' Column: Seal-impression, Knossos.

In this case and, more partially, in the next to be described, the ruddy brown surface colouring indicative of the male sex has been well preserved.

Forearm of Taureador with clenched fist.

This latter fragment, illustrated in Fig. 350 a, shows the posterior surface of a flexed left forearm with clenched hand which overlies but does not grasp a long taper object. A section across the upper part is given in Fig. 350 b. A comparison has already been suggested between the subject of this relief and part of a fresco panel from the 'Taureador' series depicting a female performer who seems to have thrown her arm over the horn of a coursing bull, her hand, however, being represented as clenched rather than grasping it.[3] In the present case, where a man is concerned, the taper object is not so easily recognized as a horn, owing to its being tinted of the same ruddy hue as the arm. Its decidedly straight outer outline might, indeed, be taken to favour the view at first held that the object was a long painted 'rhyton' like that held by the 'Cupbearer' of the Procession Fresco,[4] but in that case the youth's hand is very clearly shown grasping the lower end of the vessel.

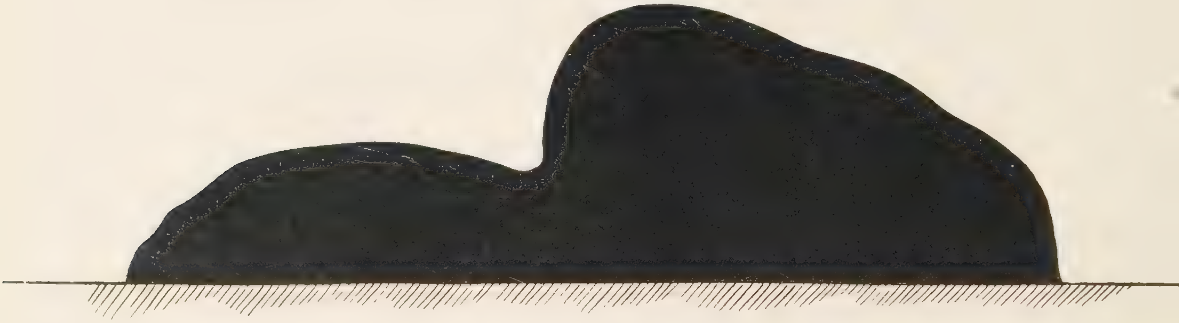

Fig. 350 b. Section of Arm and Taper Object on Line shown in Fig. 350 a.

The anatomical skill here displayed in the execution of the man's arm is of the highest order.

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[1] *P. of M.*, i, p. 689, Fig. 509.

[2] *Ibid.*, Fig. 510.

[3] See above, pp. 215, 216, and Figs. 146, 147.

[4] *P. of M.*, ii, Pt. II, Coloured Plate XII, opposite p. 707.

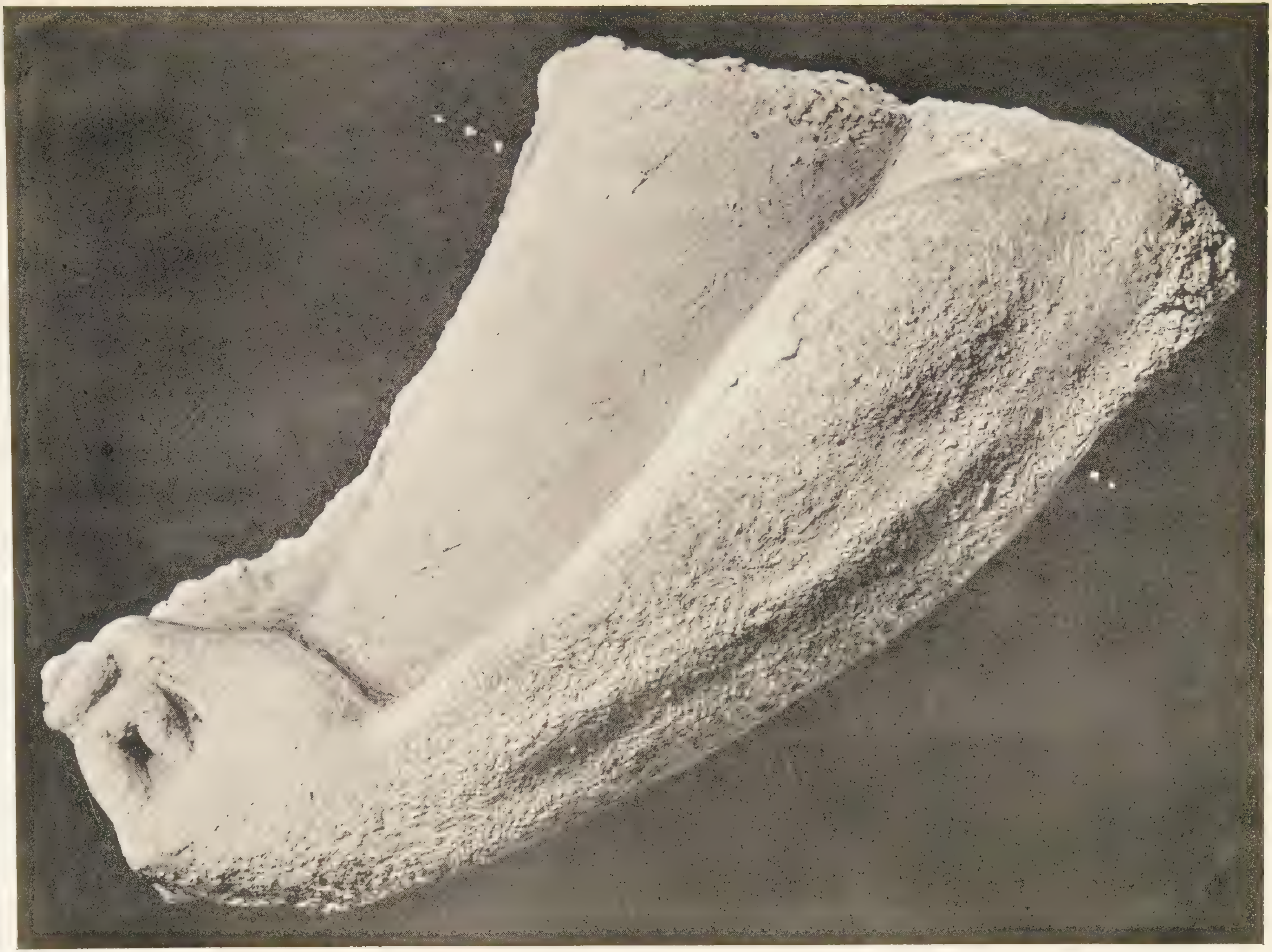

FIG. 350 A. FOREARM OF MAN WITH CLENCHED HAND, OVERLYING TAPER OBJECT: PERHAPS A HORN.

Sir W. Richmond's appreciation of this work.

Sir William Richmond, after a careful examination of the fragment, wrote as follows:

'This is an example of the plastic Art carried to high perfection not only of "style" but of knowledge of form. The anatomical features such as the planes and undulations of the rolling masses of muscle are accurate not in the sense of laboured accuracy, but of deep-seated knowledge gained by observation.

'Whether the Minoans were experts in morbid anatomy, who shall say? Very probably they were not. A sculptor at once recognizes the great difficulties which this ancient artist has overcome. With no wish to be egoistical I may say that I modelled an arm not long since exactly in this position, and, as I examine this relic of a past great Art, I see overcome innumerable difficulties which I had to solve by immediate and constant study from the living model. The bony structure is perfectly understood. The flexor and extensor muscles are represented in their state of activity or relaxation. The tendons that pass over the bones of the forearm lie upon the bones just as they do in nature. The wrist is faultless, the elbow joint, so difficult to model, is not only treated with the highest art, which means restraint, but is full of anatomical truth.'

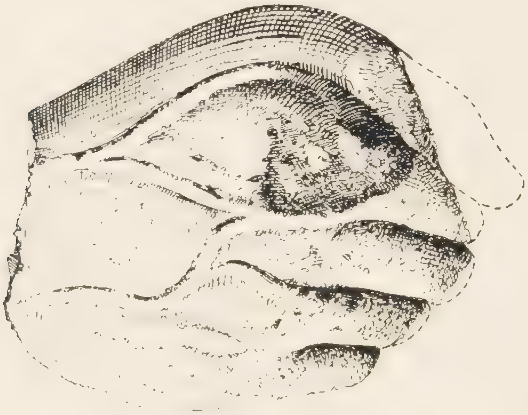

FIG. 351. STUCCO RELIEF OF HAND. (*c.* $\frac{2}{3}$)

'Seen from a foreshortened view in which the relative plan of the planes is shown, no fault of construction is visible. So large in style and yet so intimate in detail, this fragment is undoubtedly the work of an Artist fully equipped, who worked unconventionally, without *parti pris*, and whose perception was first hand. Whatever may have been the tradition upon which the style is based, Nature was his guide, and he saw Nature with as free a vision as a modern artist would do if he could.'

The hand is weaker and more conventional than the rest of the work; it has suffered, however, a good deal from corrosion, and some details are lost.

The forearm itself is 'in a position midway between pronation and supination', and Professor Arthur Thomson notes 'the good modelling of the wrist and the careful study of the arrangement of the surface contours,

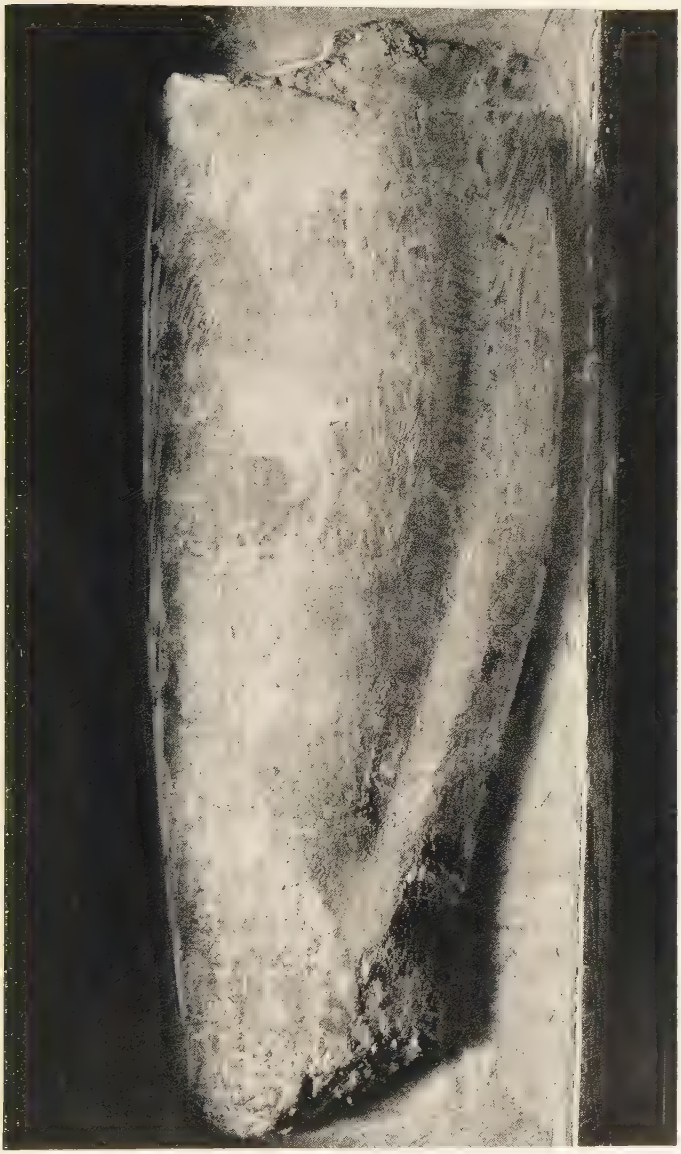

FIG. 352. LOWER PART OF LEFT LEG, JUST ABOVE ANKLE, TURNED AWAY FROM SPECTATOR. ($c. \frac{2}{3}$)

suggestive of underlying muscle'.

Hand with careful rendering of veins.

More complete evidence of the delicate treatment of details is preserved in the hand photographically reproduced to two-thirds scale in the Supplementary Plate XLI,[1] but of which a better idea will be given by the sketch made for me by Monsieur E. Gilliéron, fils, in Fig. 351. 'The technique here is more refined, the knuckles are better expressed, and the fleshy masses better interpreted, while the superficial veins on the back of the hand are subtly suggested.'[2] The careful rendering of the veins is very characteristic of Minoan sculpture, and is well illustrated, as we have seen, by the ivory figurines. The veins here, in Sir William Richmond's words, 'show the intricate observation of the Artist, the unconventional approach to Nature and his reverence for it.'

Two pieces present the lower part of men's legs. One (Fig. 352) shows the back of the left leg from just above the ankle. As somewhat completed in the sketch, Fig. 353, the foot is seen slightly turned away from

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[1] The greatest width of the original is about 10 centimetres.

[2] From a note written for me by Sir William Richmond.

Leg seen from back.

the spectator. The athletic pose recalls the foot-work of boxers on the Hagia Triada 'rhyton', where the foot of the front leg must necessarily have been turned away, though in the small reliefs they appear almost in profile. It is to be noted that the setting of the foot in this position involved a depression of the surface layer on which the relief was moulded. This, as is shown from other evidence, was not always flat.

Calf and ankle ornament.

The other stucco relief belonging to a man's leg is of simpler character, being seen in full profile (Suppl. Pl. XL). It gives the calf—sinewy and well developed—with the tendons very accurately indicated. Above the ankle are traces of a blue band which may have been part of a silver ornament, like the ankle-rings so frequently worn.

Female breast.

Female figures were more sparsely represented. The most important remains of these are two breasts already described in Vol. I of this work,[1] and here repeated in a slightly altered relative position in Fig. 354 A, coloured a dull white, according to the regular convention. A section of the right breast is given in Fig. 354 B. From this it will be seen that the surface of the plaster bed on which it rests slightly curves up.

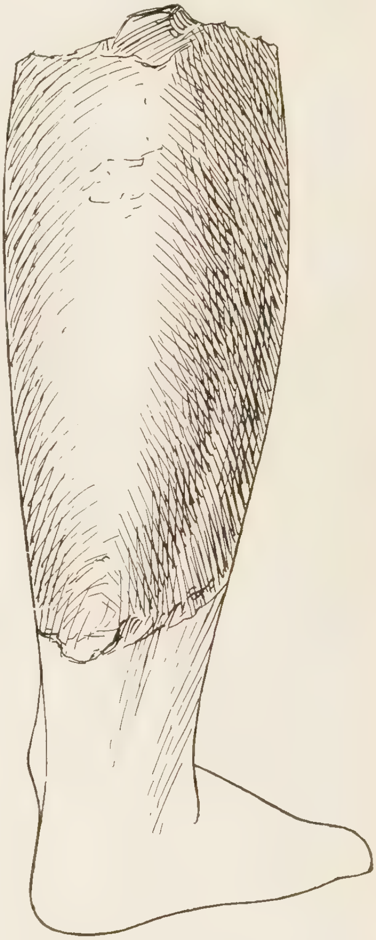
Fig. 353. Sketch showing Position of Foot in Fig. 352.

Technically these fragments have a special interest from the clear information that they give about the successive stages of the process by which the finished relief was executed. Set against the original clay backing of the wall surface was a moulded mass of plaster containing a certain proportion of coarser material, the face of which was then scored, as seen in Fig. 354 A, to secure the attachment of the upper coating, which consisted of more finely prepared lime plaster. A part of this is shown in Fig. 354 B. On the rougher surface are some accidental blotches of a ruddy tint such as was so largely used for backgrounds.

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[1] *P. of M.*, i, p. 531, and Fig. 387.

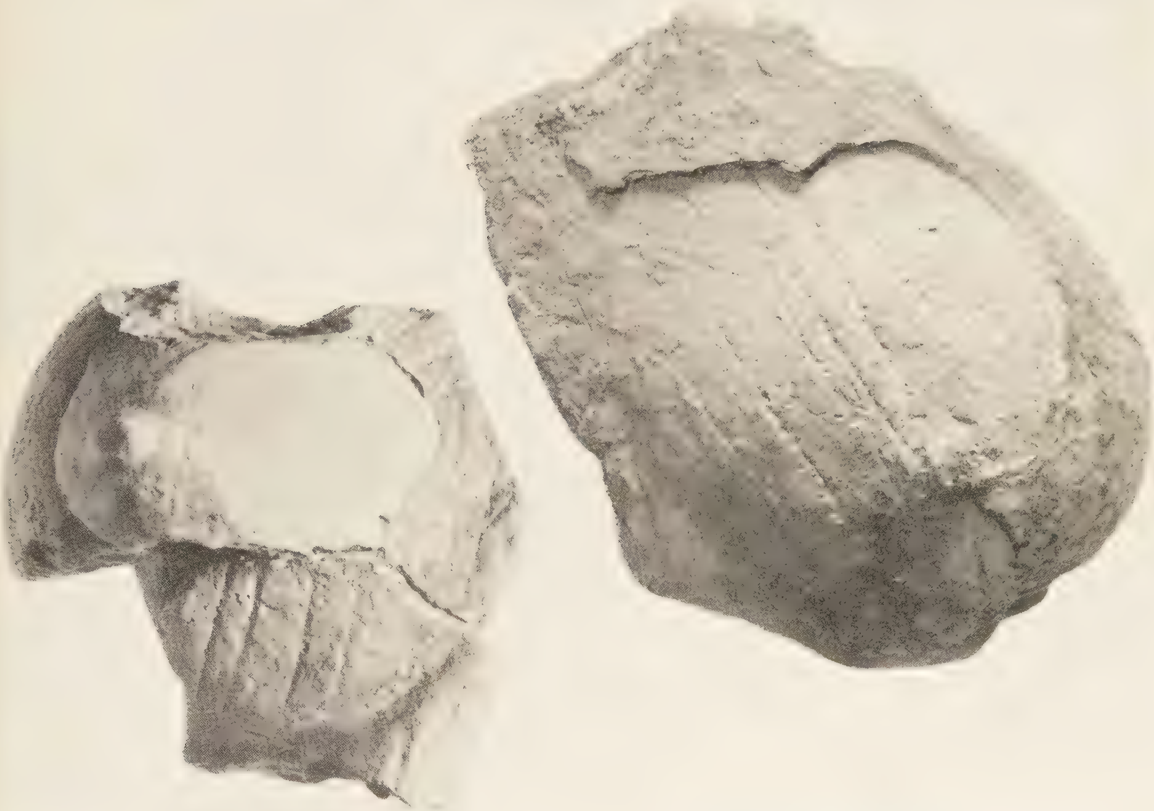

Fig. 354 a. Painted Stucco Relief of Female Breasts.

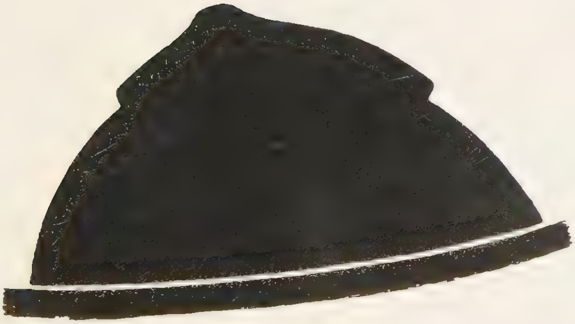

Fig. 354 b. Section of Right Breast, showing Part of Finishing Layer.

Probably of female Taureador.

The figure seems to have been facing and, as there is no trace of any kind of raiment, we may conclude that the upper part of the body was bare. According to the evidence with which we are able to deal, this nudity above must be taken to show that we have here to do with a female performer of the Minoan *Corrida*, such as we know took part in the sports attired in the same traditional loin-clothing as the youths.

Frieze with Griffins tethered to Columns.

Fragments of frieze with griffins tethered to columns.

In the same deposit with the high reliefs from the East Hall of the Knossian Palace exhibiting scenes of the Arena, there were also found fragments of painted reliefs belonging to a frieze of a more architectonic class. These were the remains of confronted pairs of Griffins attached to intervening columns as shown in the sketch, Fig. 355.[1] The Griffins, parts of which were executed in distinctly high relief—some of the forelegs even in the round (Fig. 357)–were painted white, with red and black details on a blue ground. One of these, of which a good deal of the fore-part was forthcoming, showed about the neck a section of a collar decorated with white disks on a Venetian red ground, from which hangs the end of a beaded cord wherewith, no doubt, to fasten it to the column (Fig. 356). The lower portion of the capital of one of the columns came to light, with a rounded moulding below, the surface of which was channelled, and, above this, a fragment of echinus showing foliation above. A part of a similar capital is preserved in the case of a fine columnar lamp of purple gypsum already illustrated,[2] the spirally fluted pedestal of which presents the 'Sacral Ivy' motive in its

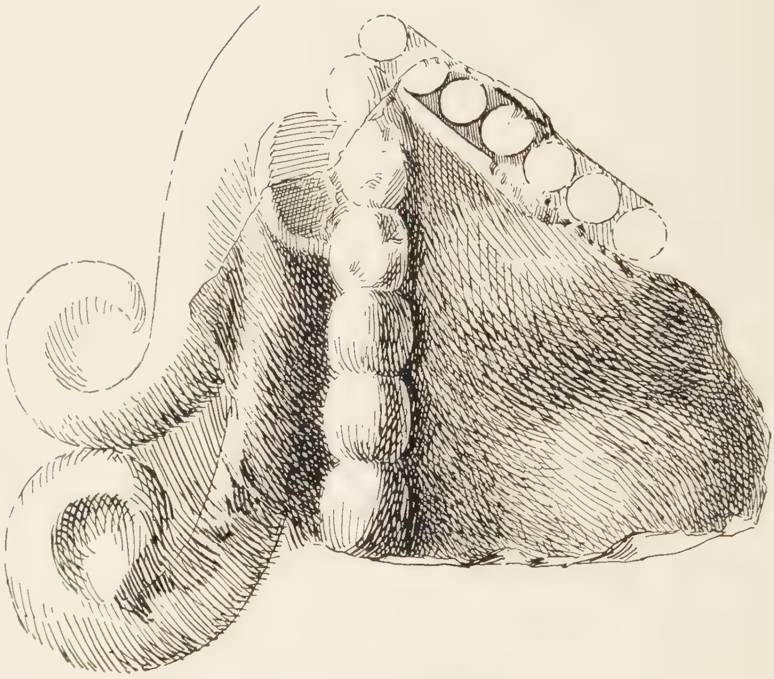

Fig. 356. Fragment of Sphinx Relief showing Part of Collar and Beaded Cord.

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[1] This restoration given in the sketch is my own suggestion. In the original scheme proposed by Monsieur Gilliéron the capital of the column was taken for a kind of diadem on a griffin's head.

[2] *P. of M.*, i, p. 345, and *ibid.*, ii, Pt. II, pp. 480, 481. The lamp was found in the S.E. House.

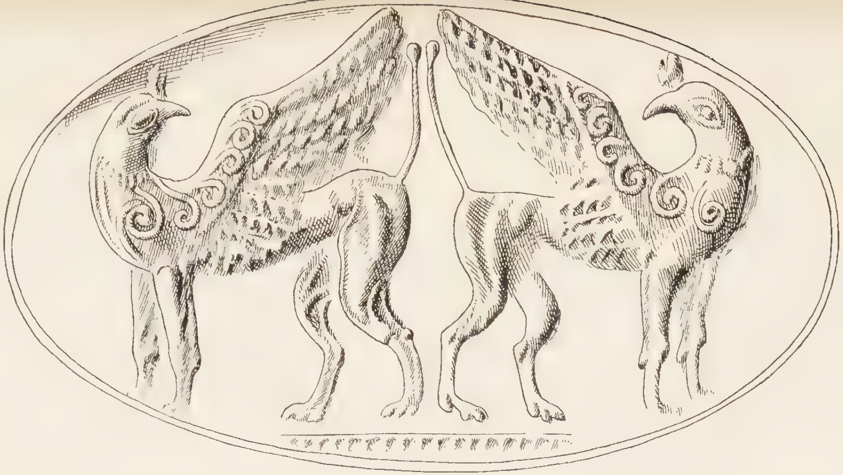

Fig. 360. Griffins on Gold Signet-ring: Mycenae. $(\frac{3}{1})$

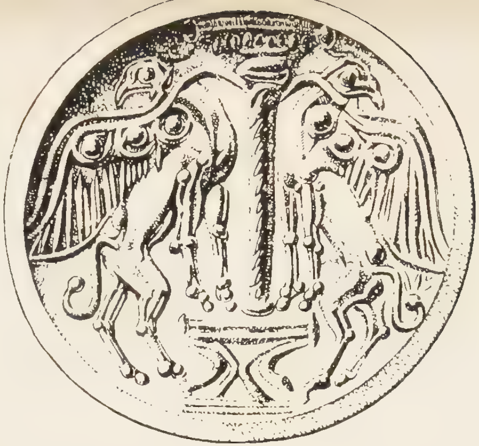

Fig. 361. Column on Base with Griffin Supporters on Intaglio: Mycenae. $(\frac{3}{1})$

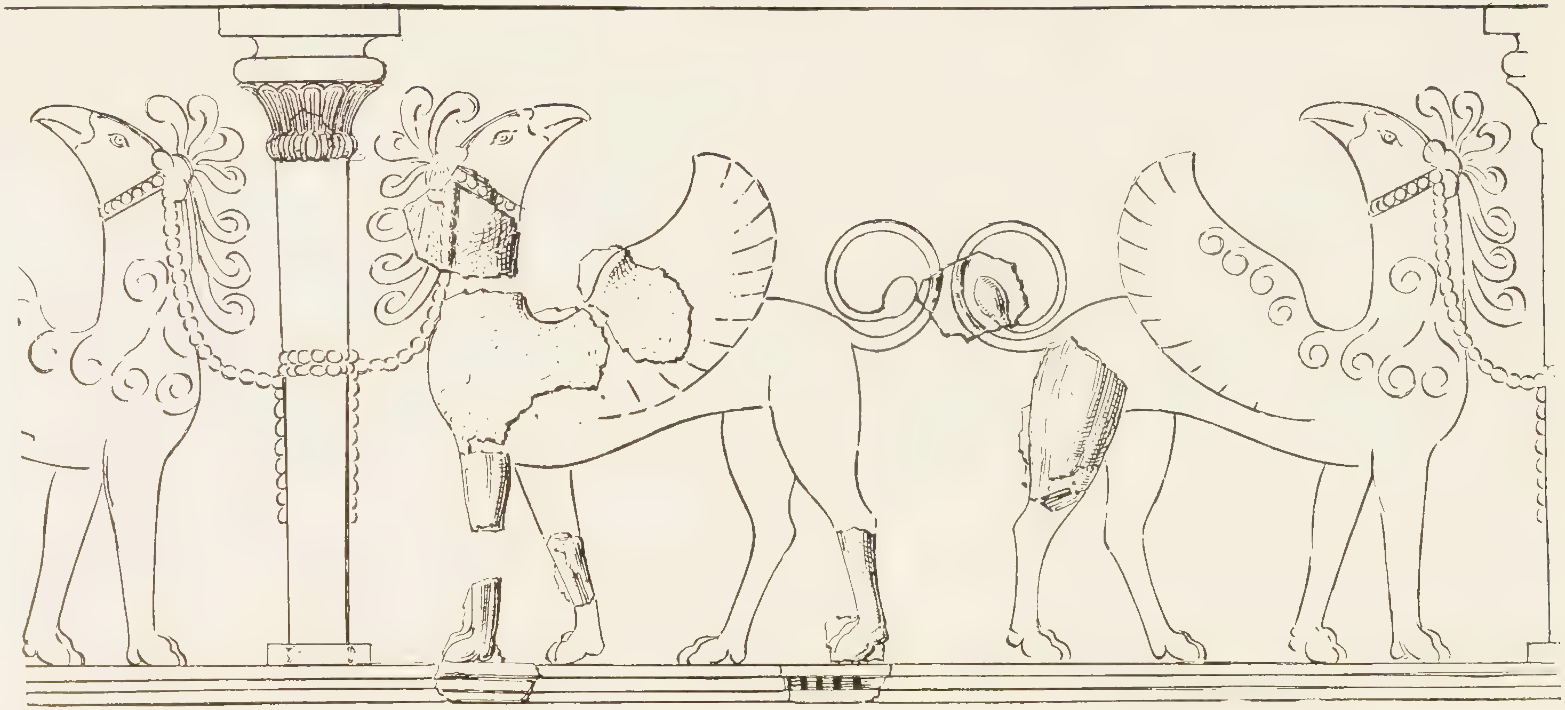

Fig. 355. Painted Stucco Relief of Confronted Griffins attached to Columns: East Hall, Knossos.

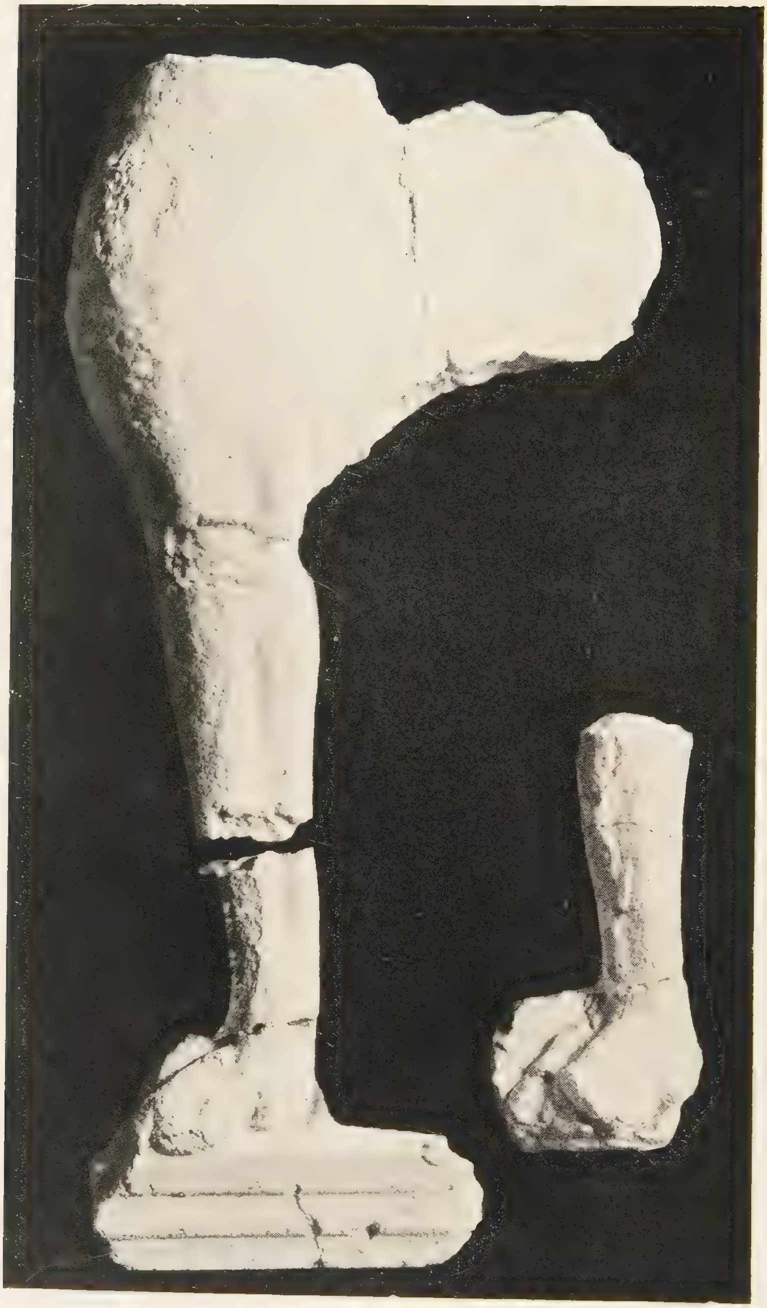

FIG. 357. FORELEGS OF GRIFFIN RESTING ON CORNICE WITH THREE STEPS

geometrical aspect, so characteristic of the M. M. III Period. This type of capital as restored in Fig. 358,[1] itself represents a version of that of the Egyptian palm column, of specially frequent occurrence during the Middle Empire, and the leaves of which, with their central stem, are derived from those of the date palm.[2]

Palm columns.

That we have to deal with a capital of this kind in the case of the Griffin friezes at the same time affords an interesting clue to the character of the columns that formed the central peristyle of the Hall itself. The marked Minoan taste for unity of style makes it reasonable to suppose that these, too, had palm capitals of the same class. Taking the mean diameter of the column-bases in the great Propylaeum Hall of the West section of the Palace—*c.* 92 centimetres[3]—as our best guide in the present case, the columns themselves, following the usual proportion of five times the breadth of the base of the shaft, would, as in the former case, have been about 4·50 metres high.

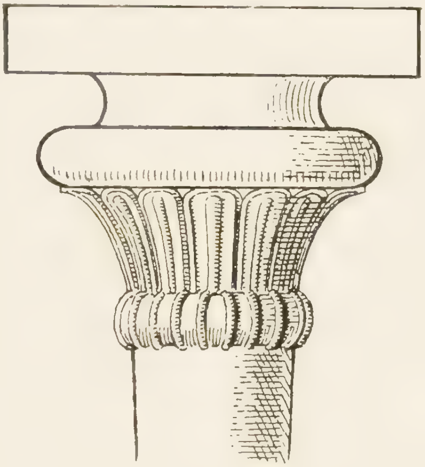

Fig. 358. Capital of Minoan Palm Column, restored.

The attitude of the Griffins finds an exact parallel on a lentoid intaglio from the Vapheio Tomb. The lower part of the foreleg preserved stands free from the background and rests on a base or cornice formed of three rectangular gradations,[4] the central of which bears a painted, barred decoration (Fig. 359).

Cornice with triple gradations beneath griffin frieze.

Something has already been said as to the important part played by this triple gradation in Minoan architecture and architectonic decoration. A section of the cornice of the Palace itself fronting the West Court shows this feature.[5] As a support of friezes, evidently presenting painted plaster compositions in relief, on interior walls, it explains the appearance of similar gradations beneath the zones of reliefs on steatite 'rhytons' and forming the base of a series of intaglio designs the derivation of which from originals depicted on the walls is thus indicated.[1]

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[1] This has been taken as a model for the restoration of the capital of the balustrade column in the 'Queen's Megaron'.

[2] On these, see especially L. Borchardt, *Die ägyptische Pflanzensäule*, p. 44 seqq.

[3] See *P. of M.*, ii, Pt. II, pp. 688, 689.

[4] Some smaller cornices or consoles of this three-stepped form also occurred. These had served as brackets to support some separate object. A complete specimen is illustrated in *P. of M.*, i, p. 688, Fig. 506.

[5] *P. of M.*, ii, Pt. II, p. 815, Fig. 533. (See, too, Mr. F. G. Newton's restored Palace façade, *ibid.*, Fig. 532, facing p. 814.)

The grouping here of the Griffins in double pairs is authenticated by the fragment showing sections of two tails symmetrically opposed. Griffins back to back occur on more than one intaglio type, as, for instance, on a gold signet-ring from Mycenae, Fig. 360. A very interesting commentary on the frieze is supplied by a lentoid gem from the same site[2] (Fig. 361) on which two heraldically opposed Griffins appear with their feet on an altar base and bound to a column, that rests upon it like that between the lion supporters of the Mycenae tympanum.

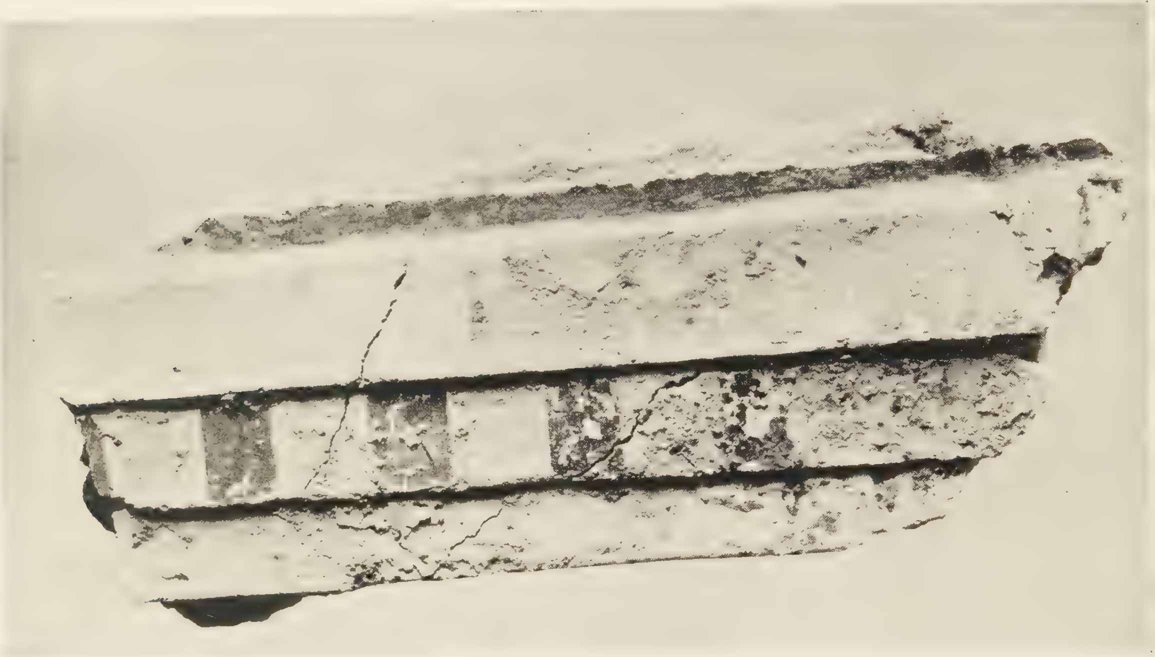

Fig. 359 Part of Painted Stucco Base with Triple Gradations supporting Frieze of Sphinxes and Columns.

Opposed griffins, compared with signet type.

Column here baetylic form of divinity.

The religious intention of this and similar schemes has been explained in my work on *Mycenaean Tree and Pillar Cult*.[3] The column here is the baetylic form of the divinity, capable, through proper rites and incantations, of being actually possessed by it. It is the emblematic 'pillar of the house' and its stablisher. Moreover, just as in other cases we see the column between its lion guardians replaced by the Minoan Rhea, so also on an intaglio of late fabric we find, in place of her sacred column, a female divinity, wearing the sacral knots on her shoulders, between two opposed Griffins.

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[1] See *P. of M.*, i, p. 687 seqq.

[2] Tsountas, Μυκῆναι, Pl. V. 6; Tsountas and Manatt, *Mycenaean Age*, p. 254, Fig. 131; Furtw., *Ant. Gemmen*, iii, p. 44, Fig. 18, and see my *Myc. Tree and Pillar Cult*, p. 60, Fig. 36.

[3] P. 58 seqq. (architectural columns with animal supporters).

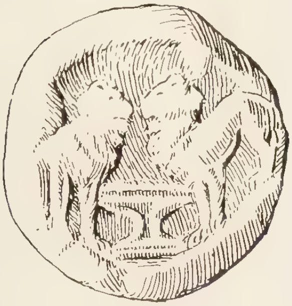

Fig. 362. Two Lions symmetrically guarding Altar-base, on Clay Sealing, Zakro.

Oriental origin of such 'antithetic' schemes.

The 'antithetic' scheme of the divine personage or object between two ramping monsters had itself penetrated to the Nile Valley from Chaldaea at a very remote period—witness the appearance of the hero Gilgames in Sumerian dress at grips with two lions on the ivory handle from Gebel-el-ʿArak.[1] But although amongst Early Minoan seal-types sequent or 'processional' animals, perhaps ultimately from the same source, are frequent, as well as reversed figures that stand in relation to Nilotic prototypes, dating from the VIth Dynasty onward, confronted types are rare.

But from the time of Hammurabi, which corresponds with the opening of the Middle Minoan Age, a direct influence from the East sets in of which we have the evidence, as shown above, in imported Babylonian cylinders. It is doubtless owing to this later Oriental current that, towards the close of the same Minoan Age and, with growing frequency, in the ensuing Late Minoan phase, religious types of the Gilgames and Isdubar cycle show their influence on Cretan Art, not only in the reproduction of the divine protagonists themselves[2] but in the predilection for the scheme of opposed monsters. It is in the Transitional Age represented by the Zakro sealings that we find for the first time such a device as two lions heraldically posed on each side of an altar, like that of the Lion's Gate[3] (Fig. 362). It is noteworthy indeed that, neither in this case nor in the parallel seal-type showing a portal above the altar between the two lions, does a column appear. On the other hand, in the somewhat later intaglio reproduced in Fig. 361, the two Griffin supporters who set their feet on a similar altar, are bound to a central column, thus completing the resemblance to the Mycenae tympanum relief.

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[1] See *P. of M.*, ii, Pt. I, p. 27, and Suppl. Pl. XII, *b*.

[2] See above, p. 466.

[3] Hogarth, *The Zakro Sealings* (*J.H.S.*, xxii), p. 88, and Pl. X, No. 128. It is there described as 'two cocks facing across an altar', but the figures are beyond doubt lions, as shown in Fig. 362. The design is in fact a variation of the type (*ibid.*, p. 87 (No. 112), Fig. 28) in which the lions are symmetrically placed on each side of a gateway, showing a similar altar within it. (See *P. of M.*, i, p. 308, Fig. 227, *c*.)

Frequency of opposed animal types in Late Minoan Art.

In advanced Late Minoan and Mycenaean Art such 'antithetic' types with a central column are constantly repeated, and they may be said to become common on gems and signet-rings from the later phase of L. M. I onwards. That prototypes like the Griffin frieze should have existed in the greater Art already at the opening of the New Era and at a slightly earlier date than that of the appearance of similar schemes on seals and ivories is only what might have been expected.

Agonistic reliefs probably on walls of back section of Hall.

As to the respective parts played by the agonistic or acrobatic compositions and the Griffin friezes in the adornment of the great 'East Hall' there is every reason for concluding that the former, which required more room for their development, would have occupied the wider spaces offered by the back wall to the East and part of the sides of this large interior section. The amount of space here available on the back wall was about fifteen metres, to which another seven and a half metres may probably be added for the two spaces between the corners on either side and the neighbouring doorways North and South, above postulated.

This gives 22·5 metres in all, or about 73 feet, of wall-space for the reliefs set out in the interior section of the Hall. Assuming that this space was reserved for the fine agonistic subjects, the disposition of these becomes an interesting question. They belong, as we have seen, to two distinct classes, those relating to such sports as boxing and wrestling, and the series connected with the *Corrida* and bull-grappling scenes, and what has to be considered is whether this amount of wall-space was really sufficient for the full development and succession of feats of such variety. It may also be asked how the episodes in which bulls took part could well be fitted on to those depicting human figures only.

Double tier of reliefs.

It is obvious that—apart from the difference in the subject, which would break the homogeneity of the series—the scenes involving the bulls as well as the performers and such acts as the seizing of the horns from above would need a higher space than the others. But the lofty character of the Hall, which, with columns four and a half metres high, would admit of a height of at least five metres—or 16 feet—for the back and side walls, might afford ample space for two tiers of subjects. It has already been assumed in the case of the Processional frescoes that the arrangement of a double row of figures had been adopted in the South Propylaeum (where the columns seem to have been of the same height as in the East Hall) and elsewhere, as in the Stepped Porch opposite. The setting of compositions representing respectively pugilistic and bull-grappling sports one above the other is in fact paralleled by the zones of small reliefs on the Hagia Triada 'rhyton'.

Griffin friezes along side walls in the narrower porticoes.

That the Griffin friezes, involving less relief, ran along the side walls in the narrower porticoes of the Hall is a reasonable hypothesis. They may well have been raised above the dado level, the stepped supports thus corresponding with the horizontal beams that would have run above this and had at the same time formed the lintel on either side of the adjoining doorway.

Of the further decoration of the Hall we have a glimpse in some much broken remains of spiral reliefs that had evidently formed part of a stucco ceiling. They were on a larger scale than those found in association with the Miniature Frescoes, but the surface was unfortunately so much decayed that in this case no trace was left of the painted element in the design.

High Reliefs Supreme Development of This Stucco Technique.

High reliefs evolved from lower.

It is fitting that the high relief technique itself should find its place at the end of the long series of Minoan painted stucco reliefs. Whether this Art—so peculiarly Knossian—goes back within the limits of M. M. II is a moot point. But the remains of this class of work found with the 'Spiral Fresco' in the basements underlying the earlier 'East Hall' are alone sufficient to demonstrate the proficiency already attained in low reliefs during the earlier phase of M. M. III.[1] Fragmentary finds, indeed, made in various parts of the 'Domestic Quarter' in the stratum representing its earliest M. M. III *a* phase, tend to prove that this class of decoration in painted low relief played a large part in its original scheme. In the case of the great compositions of the 'Vapheio' class found in the Northern Entrance passage, which have been shown to go well back into the Third Middle Minoan Period, both the eye and ear of the noble bull's head already exemplify the fullest development of high relief.[2]

Gypsum reliefs of Mycenae by Minoan hand.

On the Mainland side we see the reflection of such works as those of the bull-grappling and bull-catching scenes of the Northern Entrance Passage in the remains of the fine reliefs on orthostatic slabs of gypsum—of Knossian material and by a Minoan hand—brought to England by Lord Elgin from the entrance of the 'Atreus' Tomb at Mycenae and now in the British Museum.[3] The Lions' Gate sculpture belongs apparently to a slightly later date.

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[1] See, especially, *P. of M.*, i, p. 375 and note 1, and p. 376 and Fig. 273, showing part of a bull's foot.

[2] See above, p. 172 seqq., and pp. 189, 190. The jaw and throat of the painted plaster bull in low relief and on a somewhat small scale, found with a mass of pottery of M. M. III *b* date in the 'House of the Sacrificed Oxen' (*op. cit.*, ii, Pt. I, p. 310), may itself go back to a slightly earlier date than the associated relics.

[3] See above, p. 192 seqq., and A. E., *The Shaft Graves and Bee-hive Tombs of Mycenae and their Inter-relation* (Macmillans, 1929), p. 77 seqq.

In the partial restoration of the Palace, that, as we have seen, took place towards the close of L. M. I *a*, and to which the spiral friezes and 'Shield Fresco' belong, relief of any kind has vanished from the scene. Neither do we find it in the Mainland Palaces that continue to represent the advanced phase of Late Minoan Art. Stucco relief seems to have gradually attained a maximum by the closing post-seismic phase of M. M. III, *ex hypothesi* represented by the restored 'East Hall', and to have then disappeared.

Maximum of relief attained by close of M. M. III *b*.

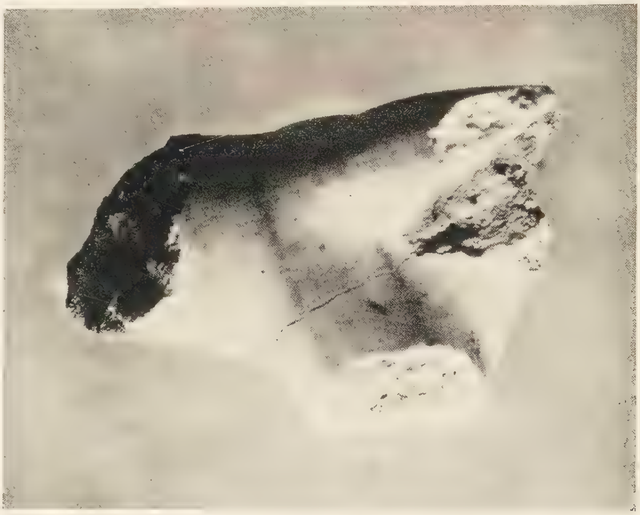

Fig. 363. Fragment of Hand belonging to Figure of Marble-like Stone.

Painted Stucco Head in the Round from Mycenae.

Concurrent progress of works in the round.

A natural concomitant of the tendency that this progress embodies would be an increased development of plastic or sculptured works in the round. Of the existence of such figures cut out of stone we have something more than the evidence of the beautifully executed 'Fitzwilliam' Goddess and of the little steatite image from Tylissos described above. In disturbed earth on the Eastern Palace slope, probably belonging to a date not earlier than L. M. II, there was brought out a fragmentary hand of marble-like white limestone with greyish veins that had been broken off some small statue (Fig. 363). The figure to which it belonged would have been as nearly as possible half scale,[1] or about 90 centimetres (2 feet 8 inches) in height. The work itself is of a very conventional kind.

Hand of stone figure, half natural size.

That such works, of composite construction indeed, were already beginning to attain considerable dimensions may be gathered from the size of the steatite locks of the Sphinx[2] that had found their way into the drain-shaft from the adjoining 'East Treasury'—though we have here rather to deal with an imported work from the Anatolian side. The face itself beneath the locks was in that case of some perishable material, probably hard wood, perhaps coated with gold foil in the customary manner. Its height, from beneath the locks of hair above the forehead to where, conjecturally, the point of the chin would have been, was about 14 centimetres ($5\frac{1}{2}$ inches), in other words about two-thirds the height of a human face.

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[1] The width of the palm taken just above the offshoot of the thumb was approximately 4 centimetres, the normal average being about 8 cm.

[2] See above, p. 419 seqq.

Life-size female head of painted stucco from Mycenae.

An example of a painted stucco female head, in the round, supposed to be that of a Sphinx belonging to the advanced Late Minoan Age, and of about the same scale, came to light within the acropolis of Mycenae in 1896 and has been described and illustrated by Tsountas.[1] Some idea of this may be gathered from Fig. 364, *a*, *b*. The height of the face from the chin to the borders of the head-piece is about 15·6 centimetres (*c.* $5\frac{3}{4}$ inches) or about two-thirds of the natural size—approximately the same scale as the Knossian Sphinx.

The plaster of the head has a pale ochreous ground, on which the details have been filled in in black, red, and blue. A curious feature is the marking of forehead, cheeks, and chin with red asterisks, which recall a rendering of the nipples of female breasts seen on stucco reliefs of the same group as the 'Ladies in Blue' and the dotted circles round the breasts of certain Melian and Theran vases.[2] Such decoration, as applied to a face, in fact, takes us back to the 'tattoo' marks of an Early Cycladic marble image.[3] The eyes, as is not unusual in Minoan work, are set at a somewhat oblique angle, the ears are too high, and the details, generally, disproportioned. The contours of the face indeed almost suggest turner's work with a slight hollowing out for the eyes and mouth.

Parallel to bar ornament of diadem from later Palace at Tiryns.

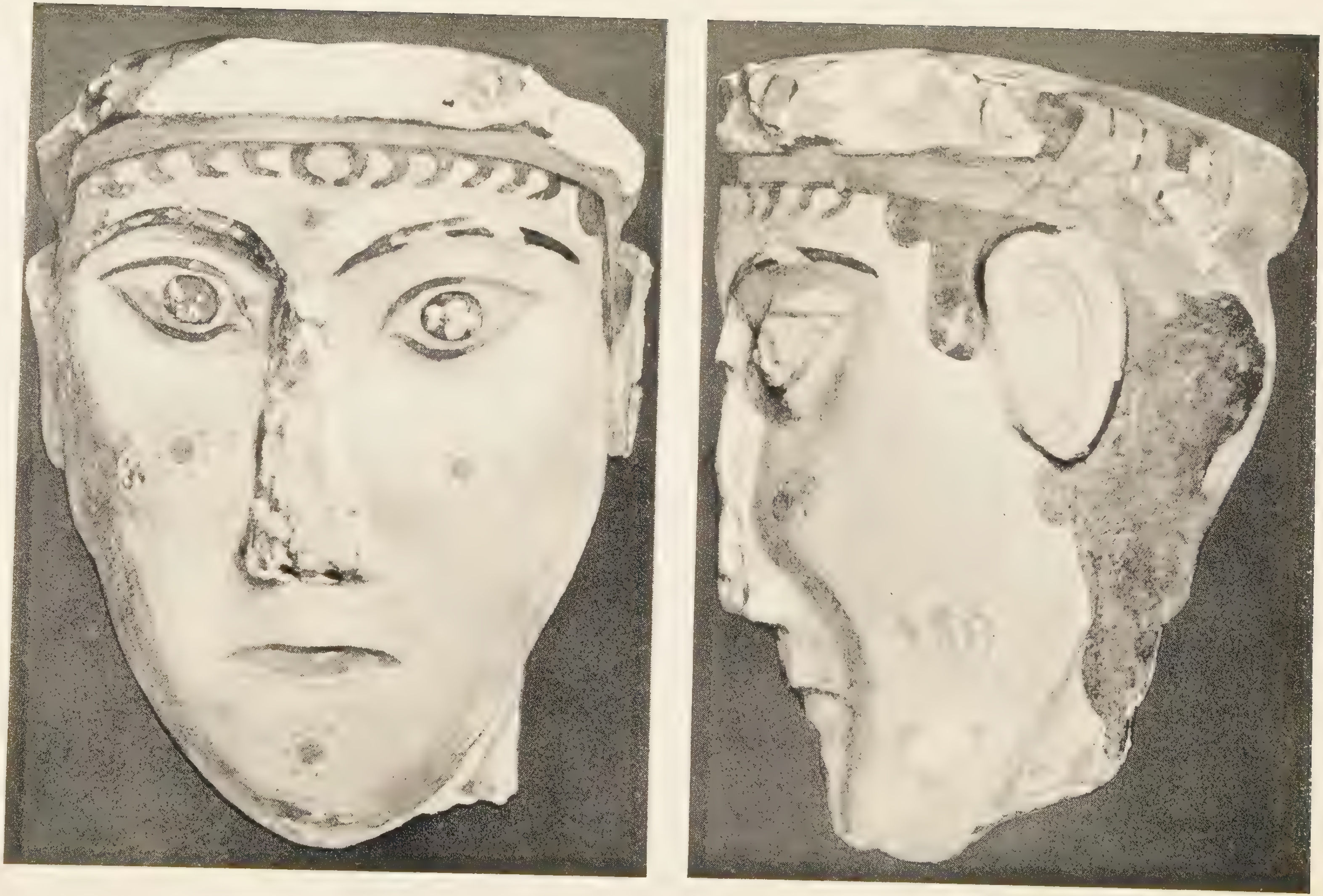
A row of symmetrical curls peeps out from under the red band circling the forehead, and the hair falls in longer locks over the ears and neck. The upper part of the diadem shows on its border a pattern consisting of broad black bars at intervals on a blue band, the interspaces being crossed by fine black lines. This ornament stands in close relation to a decorative motive seen in the 'Hunting Fresco' of the Later Palace at Tiryns.[4]

[1] 'Εφ. 'Αρχ., 1902, p. 1 seqq. (Κεφαλὴ ἐκ Μυκηνῶν), and Plates 1 and 2, from which Fig. 364, *a*, *b*, is taken. It was found in the ruins of a building a little South of the polygonal tower on the West wall.

[2] On a female figurine—said to have been found in Greece (Pottier, *Rev. Arch.*, xxxiv (1899), p. 10, Fig. 7), but really of a typical Eighteenth Dynasty Egyptian class—asterisks like those here seen on the face mark the buttocks as well as the breasts and navel. Similar asterisks are a common decorative motive on L. M. III. pottery.

[3] Blinkenberg, *Antiquités prémycéniennes* (in *Mémoires des Antiquaires du Nord*, 1896, p. 45 seqq.), and cf. Tsountas, 'Εφ 'Αρχ., 1898, p. 195 seqq. and R. C. Bosanquet, *B.S.A.*, iii, p. 66.

[4] Rodenwaldt, *Tiryns*, ii, Pl. XII. The blue and black pattern on the chariot wheels is identical, and a closely related variant forms part of the border.



a *b*

FIG. 361. FEMALE HEAD IN THE ROUND, OF PAINTED STUCCO, WEARING 'BANDEAU' WITH BARRED ORNAMENT. *a*, FACING VIEW SHOWING RED 'ASTERISKS' ON CHEEKS; *b*, PROFILE, WITH LOCKS FALLING DOWN THE BACK OF THE NECK. (*c.* $\frac{3}{4}$)

This conventional pattern may give an approximate clue to the date of this plaster head. Against the view that it belongs to a Mycenaean Sphinx there is the insuperable objection that no trace appears on the upper surface

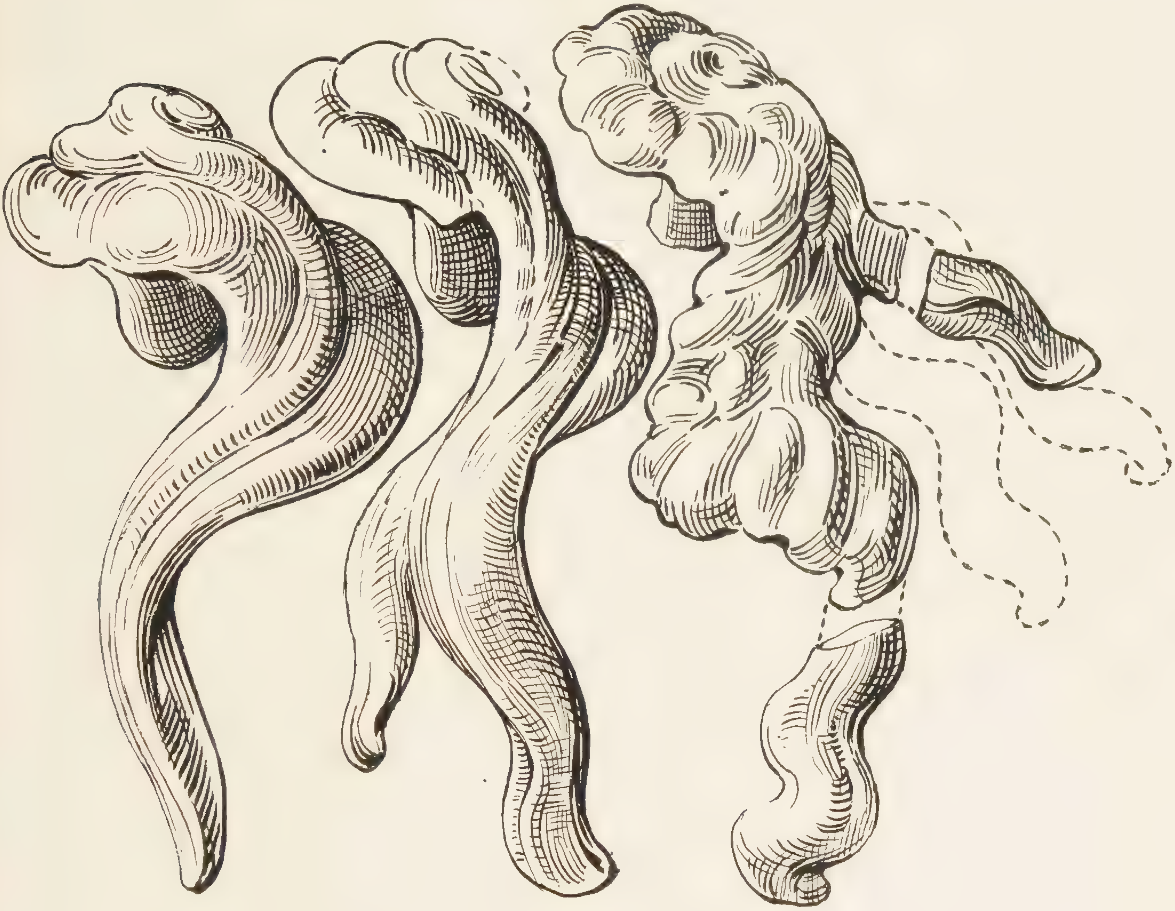


Fig. 365. Bronze Curls from Gigantesque Female Figures. ($\frac{2}{3}$)

of the head-piece of the crest that is the never-failing characteristic of the monster. More probably we may recognize the head of the Minoan Goddess.

It is unfortunate that none of the painted plaster fragments from the 'East Hall' has supplied a record of the face of a human figure. Judging from general analogy it is not likely that it would have stood on the same high artistic level as the various parts of the body, remains of which actually occurred in the deposit. It will be remembered, indeed, that, in the case of the 'Priest-king' relief, the indications that we have lead to the conclusion that it was painted on the flat. But, whatever results may have been achieved by the consummate craftsmen who decorated the great Hall, Influence on wood-carving visible in stucco head.

we may at least presume that it there followed the lines of plastic Art. The executor of the plaster head from Mycenae certainly owed most of his experience to wood-carving, and the work itself may be taken to show the reaction of contemporary wooden images of comparatively large size.

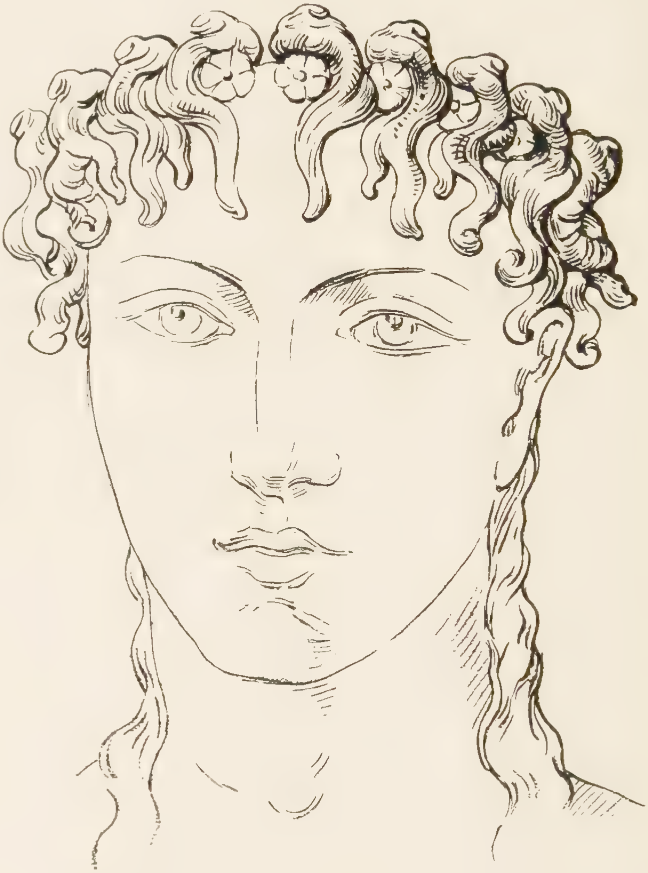


Fig. 366. Head of Figure showing Curls as conjecturally restored. ($c. \frac{1}{5}$)

Bronze Locks of Great Wooden Statue.

Discovery of large bronze locks of hair by N. wall of E. Hall.

An interesting discovery made, amidst a mass of carbonized wood, in a superficial stratum just beyond the Northern boundary line of the restored 'East Hall', leads to the conclusion that such an image—of composite construction like the steatite Sphinx—had once found a place within it. The find consisted of a group of four massive bronze objects that clearly represent curling locks of hair, very elegantly modelled. Three of these are shown in Fig. 365, and in Fig. 366 all of them are adapted to the outline of a human head.[1] They had evidently been designed for arrangement, as here shown, over the forehead and temples, the small interspaces being filled up by little ornaments such as the rosettes here conjecturally inserted. It looks as if the bronze locks had overlain a bandeau thus adorned.

As in the case of the locks of the steatite Sphinx, with which, in this respect, the bronze specimens present a certain analogy, no trace was preserved of the face that they overlay. We must suppose that here, too, the face itself had been carved or moulded in some material that has entirely perished. That these bronze locks were set above a carved wooden core is extremely

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[1] The drawing shown in Fig. 365 was executed for me by the Danish artist, Mr. Halvor Bagge.

Embedded in carbonized mass.

probable, since the large scale of the figure to which they belonged makes it difficult to suppose that the material was ivory, of which, indeed, or of any solid plaster composition some remains would have been preserved. On the other hand, the charcoal mass found in the same deposit, and in which these bronze objects were actually embedded, may itself have been largely due to the carbonization of a large wooden statue. We may, however, well believe that it was also inlaid and overlaid with ivory or other choice materials.[1]

Belonging to wooden figure of gigantic proportions.

The work, indeed, judging by the size of the locks of hair, must have been of considerably over life size. Thus one of the central bronze curls is 15 centimetres in length, and the proportional height of the face to harmonize with such a fringe above would have been considerably over life size. The actual head, based on the drawing—about a fifth of the original—reproduced in Fig. 366, would be about 40 centimetres (14¾ inches) in height, which, according to the seven to one proportion, would point to a stature of 2·80 metres or about nine feet. If, as is probable, there was some kind of tiara on the head, half a foot or more must be added to this.

That the giant figure thus implied was hewn and carved out of one of the great native cypresses,[2] such as provided the beams and columns of the Palace itself, is the most probable conclusion. Nor can any one at all familiar with the spirit of Minoan Art for a moment doubt of the brilliant polychrome colouring both of limbs and robes. This may have been effected, not only by the insertion of various inlays but—as in the case of the small steatite image from Tylissos illustrated above[3]—by means of a thin overlaying of fine stucco such as that used for the fresco panels. The bull's head 'rhyton' from the Little Palace affords the presumption that the eyes were of crystal, tinted below. The bronze locks would themselves, according to the usual practice, have been covered with gold foil or plating, and the free and naturalistic manner of their moulding is a sure token that the sculpture of the statue itself did not fall behind the noble works of plastic Art with which it was associated on the walls.

What was the sex of the image? Happily the curling bronze locks of

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[1] A remarkable parallel to such a composite figure is presented by the remains of a statue of Apollo Aleus found at Cirò in Sicily. The head, of marble, with holes for the attachment of bronze locks of hair, a hand and two feet, also of marble, were found, but the body, unquestionably of wood, and, doubtless, inlaid, was wanting. Only the sockets of the eyes were preserved, these having been supplied by composite materials. (See A. della Seta, *Italia Antica*, pp. 152, 154, and Fig. 156, and cf. Orsi, *Atene e Roma*, 1925, pp. 28–31, and Amelung, *Römische Mittheilungen*, 1925, p. 196.)

[2] *Cupressus horizontalis*.

[3] P. 427, Fig. 293.

Female sex indicated.

its fringe of hair supply a decisive argument as to this. It has been shown above, in discussing the bull-grappling reliefs and frescoes, that the otherwise similarly clad acrobatic figures of both sexes can, without much difficulty, be distinguished by the greater exuberance of the locks, especially over the forehead, in the case of the girl performers. Analogy with these can leave little doubt that the bronze locks of the image under discussion also belonged to a female head.

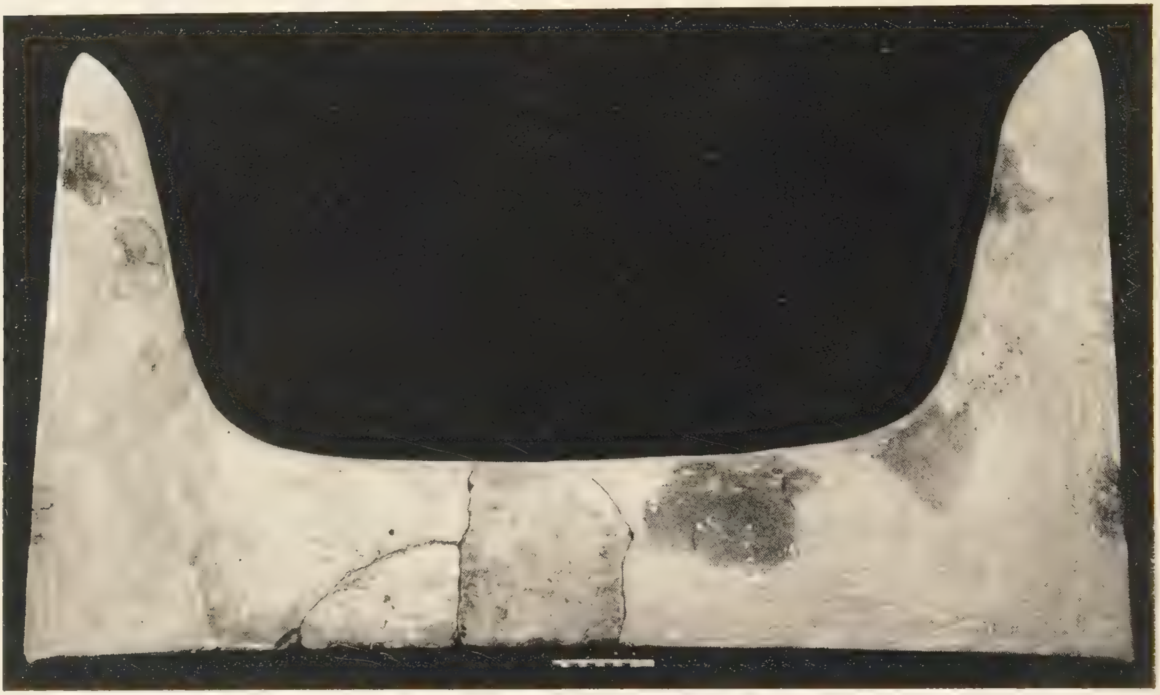

Fig. 367. Sacral Horns of Painted Plaster found North of East Hall.

The 'Xoana' of Daedalos.

Such a wooden image or 'Xoanon', with its gold plating and varied inlays, if seen in later times, would certainly have been ascribed to Daedalos, the mythical craftsman of Minos, who, according to the Greek tradition, had brought this Art to greater perfection. Some of the statues of this type were, it appears, of exceptional size, like that of Hermes—made of juniper wood—seen by Pausanias on Mount Kyllênê, in Arcadia, and which he guessed to be about eight feet high.[1] That actual Minoan works of this class may have survived in ancient centres of cult in comparatively late

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[1] Pausanias, viii. 172 (Frazer's transl., i, p. 395). Pausanias in this passage says that these ancient images were made of ebony, cypress, the cedars, the oaks, yew, and lotus.

Classical times is quite possible. I have myself seen in a Macedonian church an early medieval image of the Virgin and Child that had escaped the fury of the iconoclast Emperors.

A cult image of Minoan Goddess.

A female image of this size can hardly be other than the Minoan Goddess herself. As illustrating the religious side of this great Hall the discovery, near the deposit containing the bronze locks, of remains of Sacral Horns,[1] of exceptionally large dimensions, Fig. 367, is also of special interest, whether or not they were actually placed before the giant 'Xoanon' of the divinity. In any case we may conclude that, even to a larger extent than the 'Hall of Double Axes' or the 'Queen's Megaron' below—where the cult element was certainly present—the great 'East Hall' combined something of the character of a Temple. The exceptional dimensions of the Sacral Horns found by it might, indeed, prepare us for this conclusion.

Large sacral horns near. Probable position in posterior section of Hall.

As to the position that the image occupied in the Hall some possible indication may be supplied by the place where the bronze locks were found just outside the Northern limit of the area. That it was placed within the posterior covered section may be fairly assumed; on the other hand the central column of the peristyle would have impeded a free view of it from the other end of the Hall, if it had been placed in the middle space. That it stood nearer the North wall facing South along the length of this inner part of the Hall accords best with the locality in which the bronze tresses and adhering charcoal deposit lay. Assuming that a window opening existed about the door opposite, the image would have been illumined with a good Southern light.

In the mind's eye, at least, we may revive the impression of this giant statue of the Minoan Goddess, towering above her worshippers in the body of the portico, and standing out against the half gloom beyond with its varied inlays, including, we may believe, crystal eyeballs with the pupils darkly limned below, its bright polychrome hues and the wealth of golden tresses falling about its brows,—a radiant vision of divinity, as if descended from on high.

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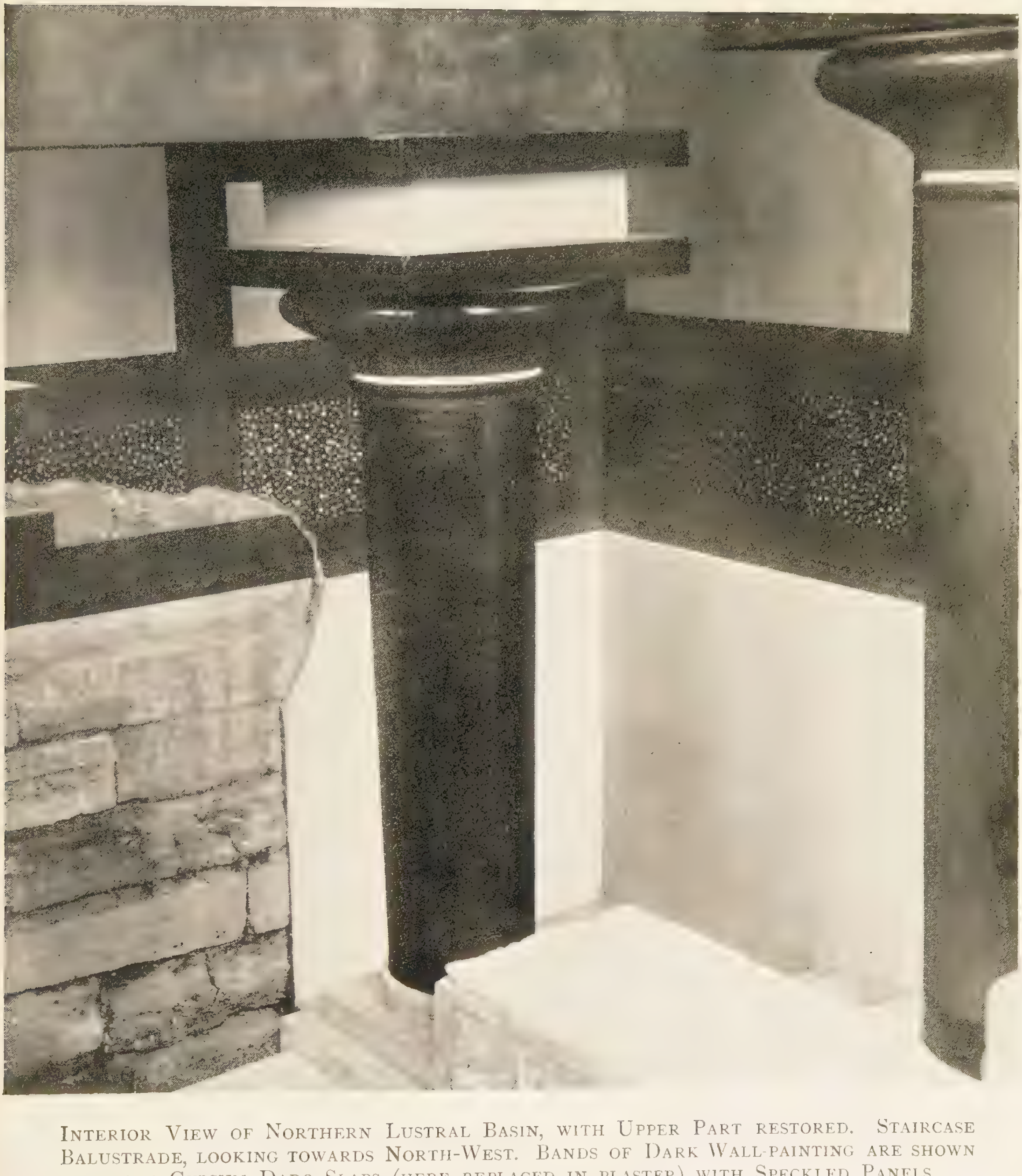
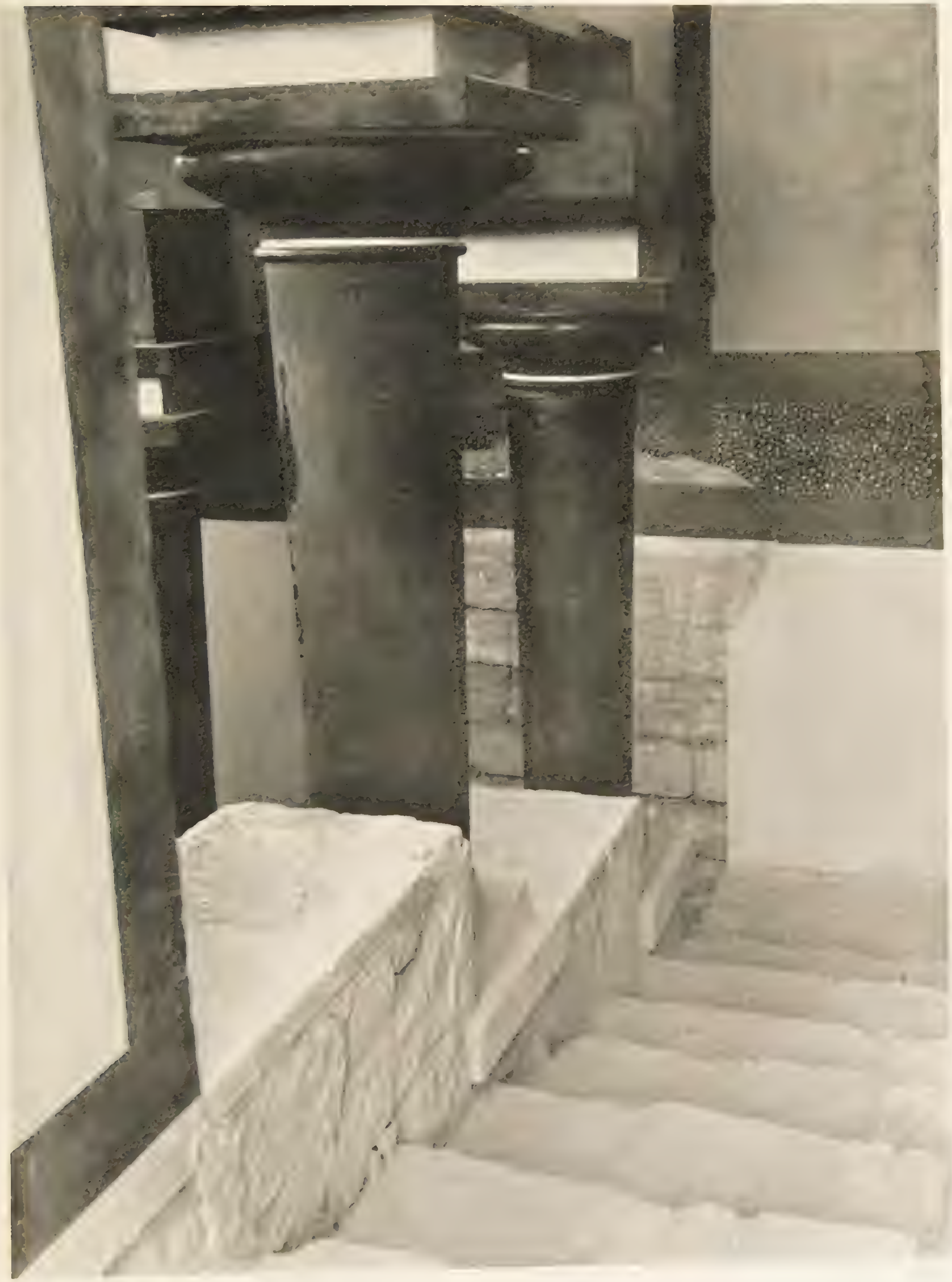
[1] These are of stucco faced with a light ochre with a clay core, and have been set up, as restored, in the Candia Museum. The breadth is 1·30 metres, and the height 0·74.

SUPPLEMENTARY PLATES

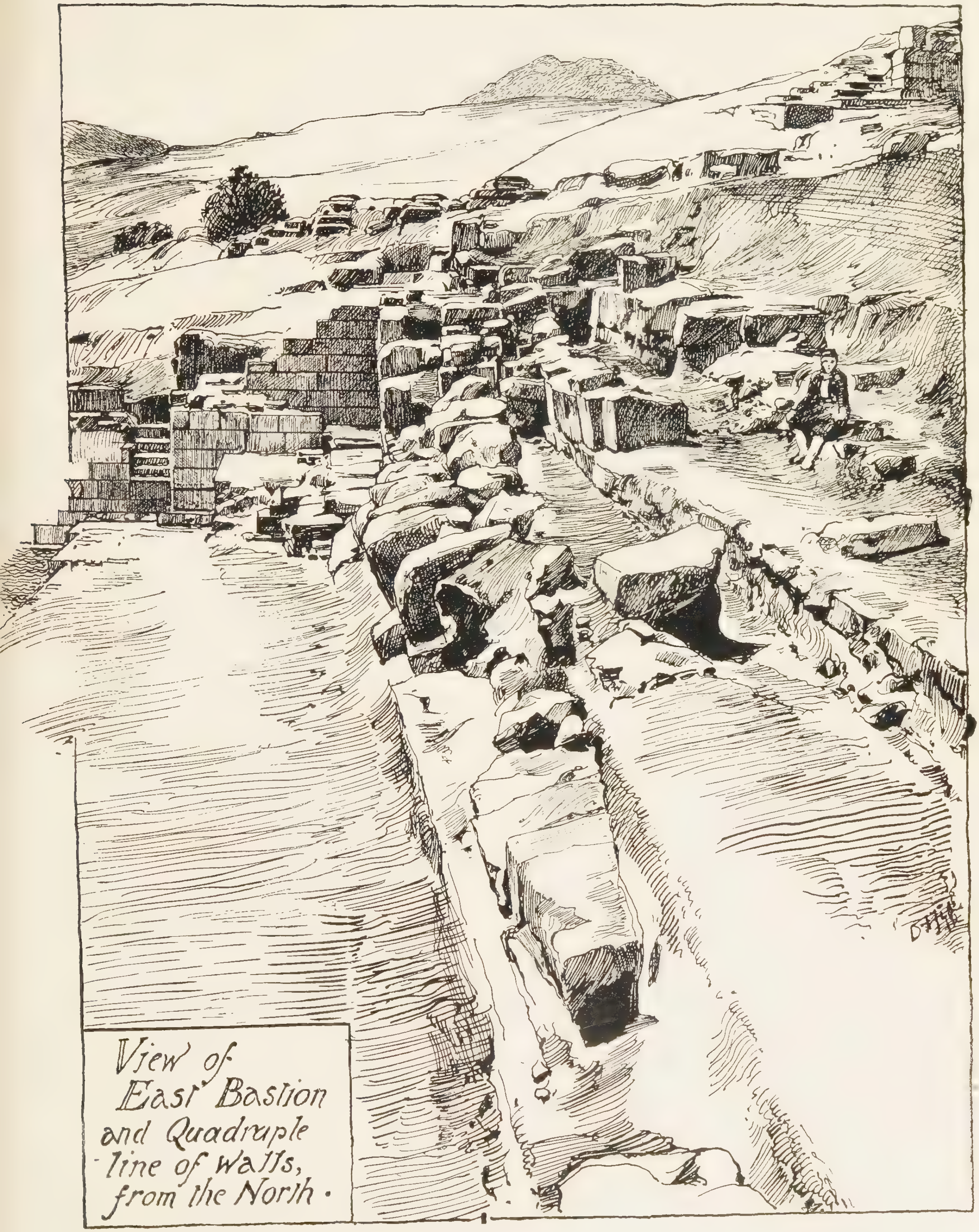


INTERIOR VIEW OF NORTHERN LUSTRAL BASIN, WITH UPPER PART RESTORED. STAIRCASE BALUSTRADE, LOOKING TOWARDS NORTH-WEST. BANDS OF DARK WALL-PAINTING ARE SHOWN ABOVE GYPSUM DADO SLABS (HERE REPLACED IN PLASTER) WITH SPECKLED PANELS.

(See p. 9.)

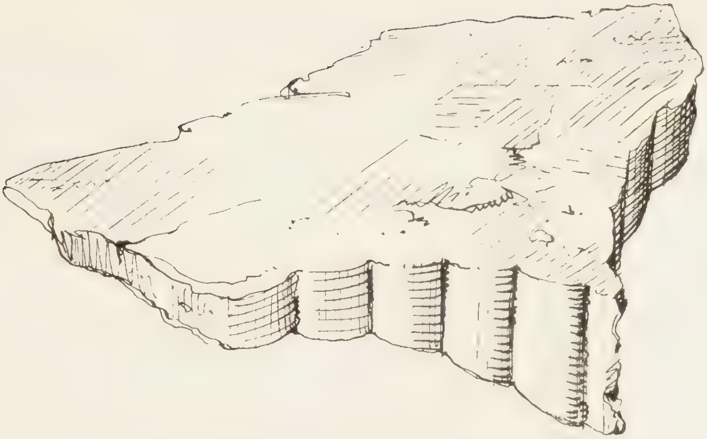


Interior View of Northern Lustral Basin looking down First Flight of Stairs to West. (See p. 9.)

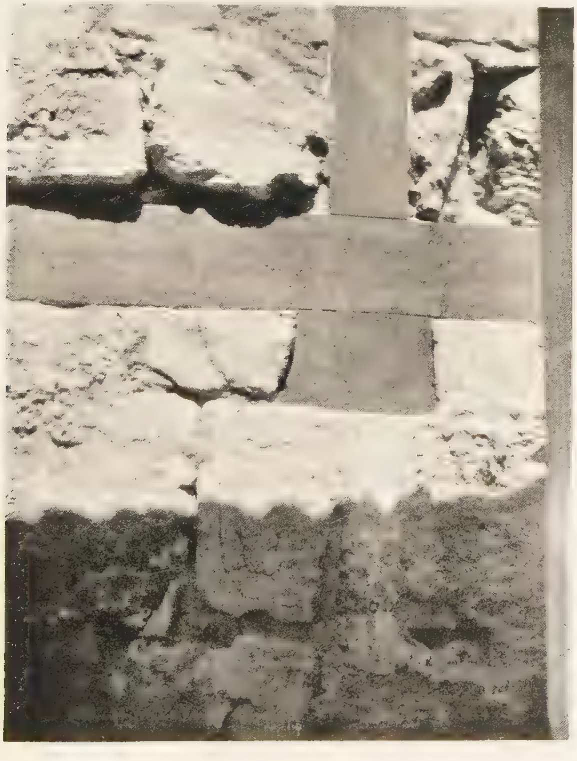


View of East Bastion and Quadruple line of walls, from the North.

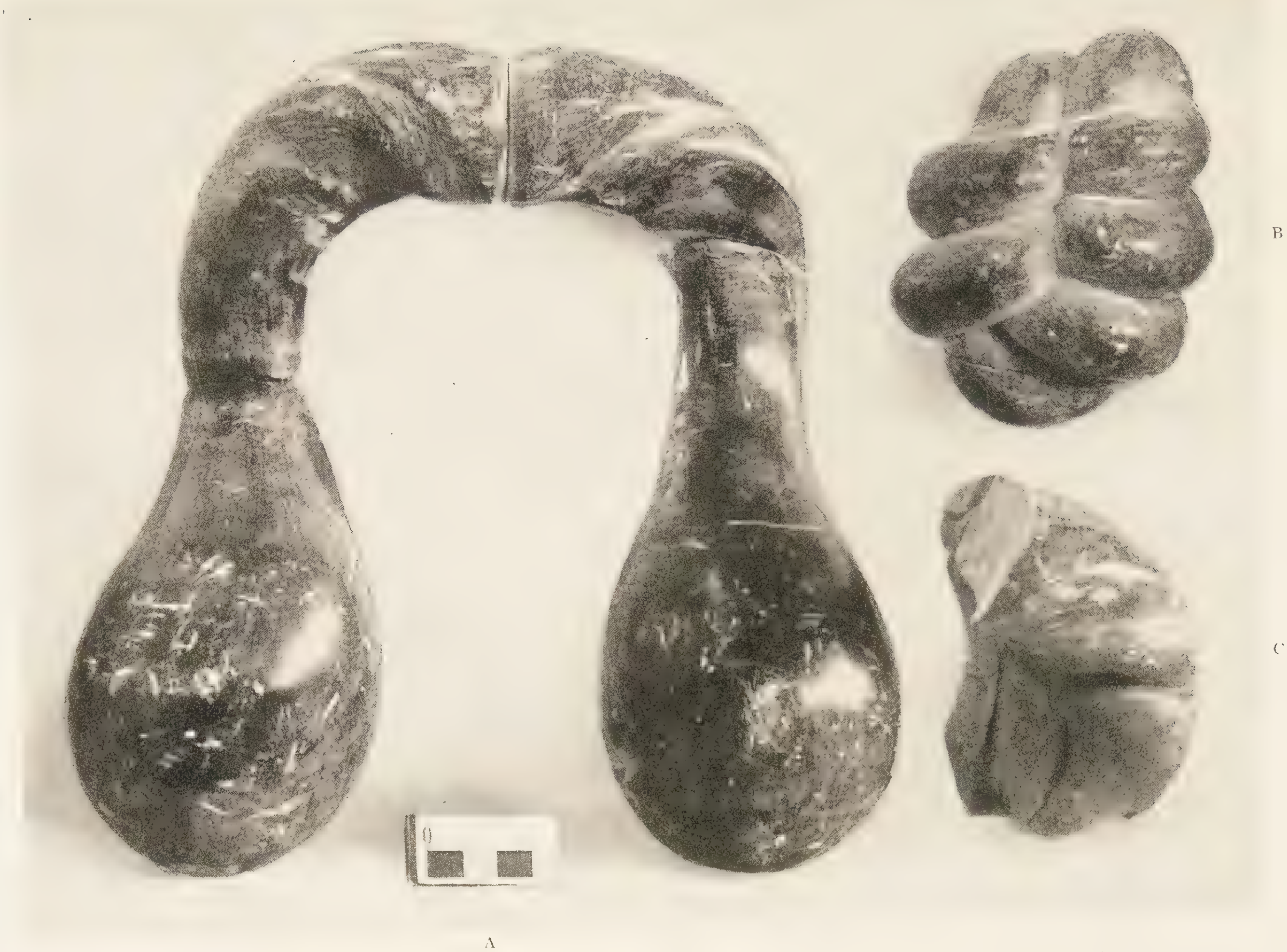
(See p. 234.)



b. PLASTER MASS SHOWING IMPRESS OF FLUTED COLUMNS. EAST SLOPE. (See p. 323.)

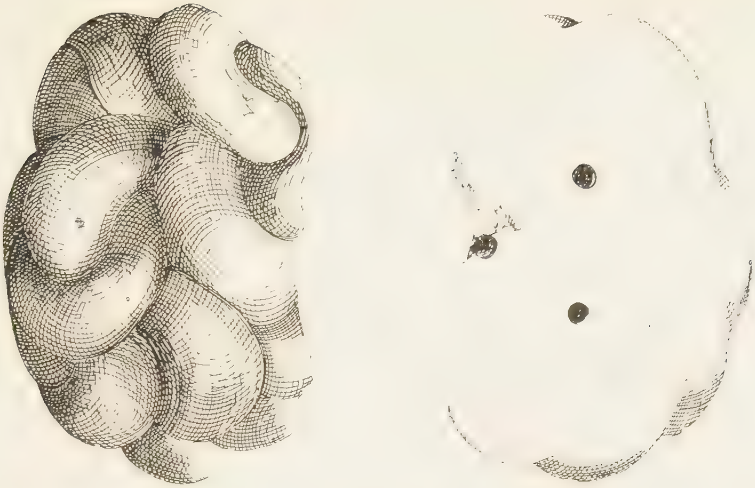


a. VERTICAL POST (SOCKETED IN M. M. II MASONRY) WITH BASE TAPERING UPWARDS. EAST CORRIDOR. (See p. 65.)

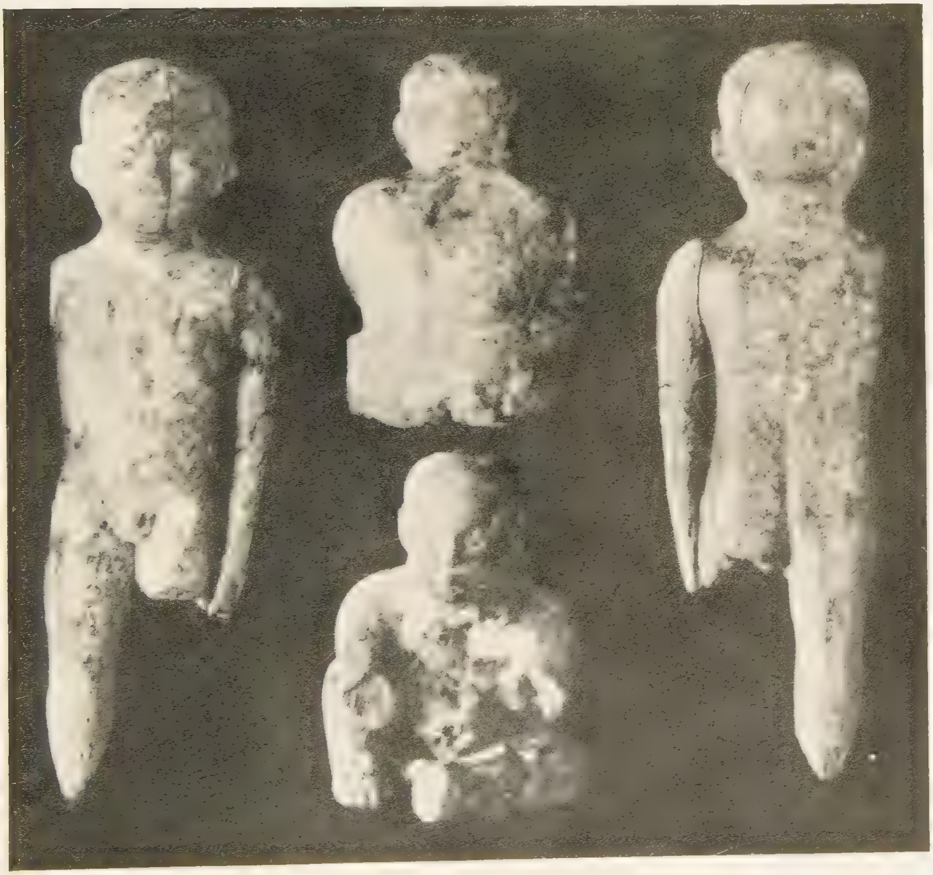


STEATITE LOCKS OF SPHINX OF HITTITE TYPE FROM DEPOSIT IN STONE DRAIN-SHAFT ($c.\ \frac{2}{3}$)
(See p. 420 seqq.)

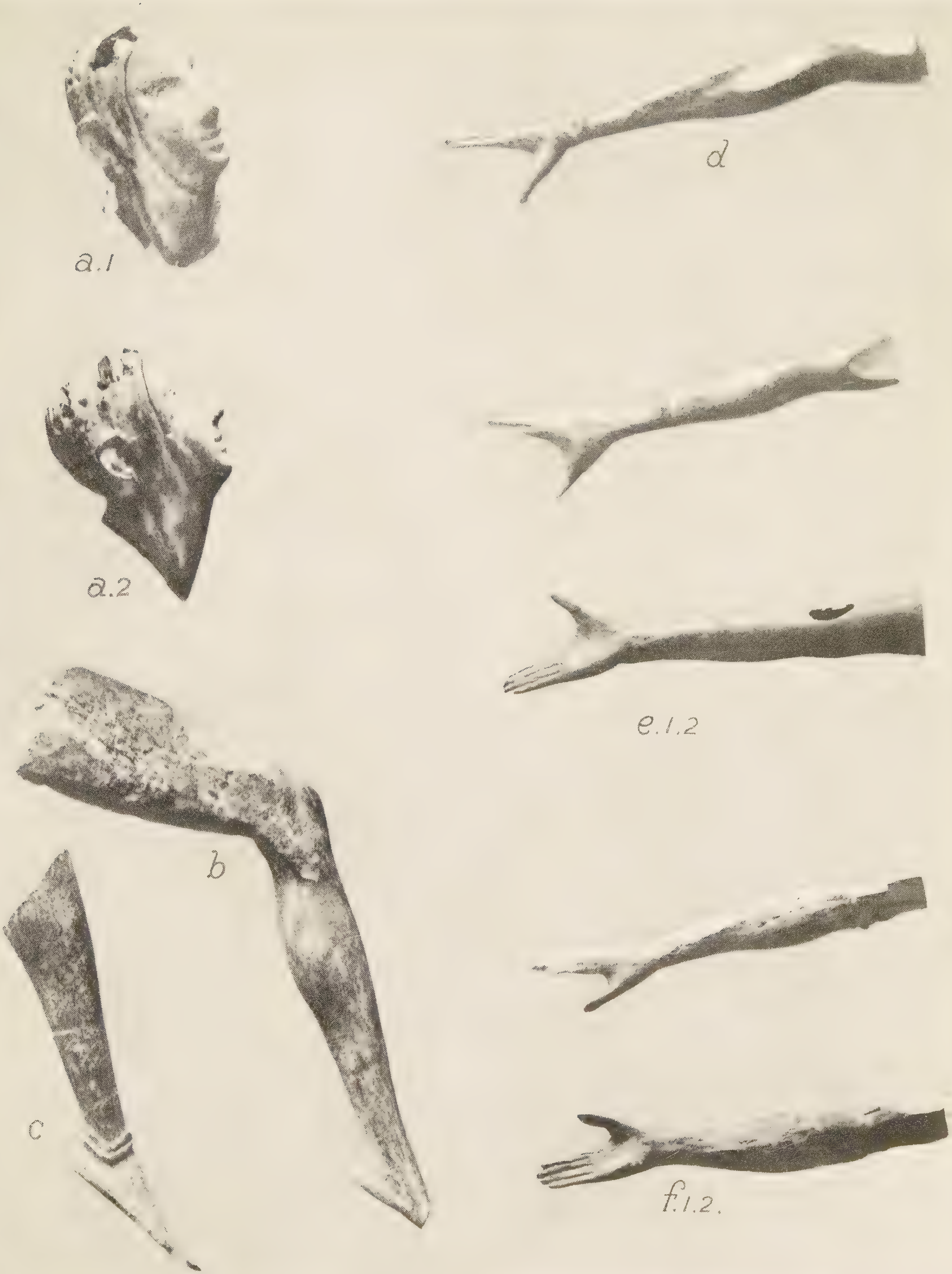
SUPPLEMENTARY PLATE XXXVII



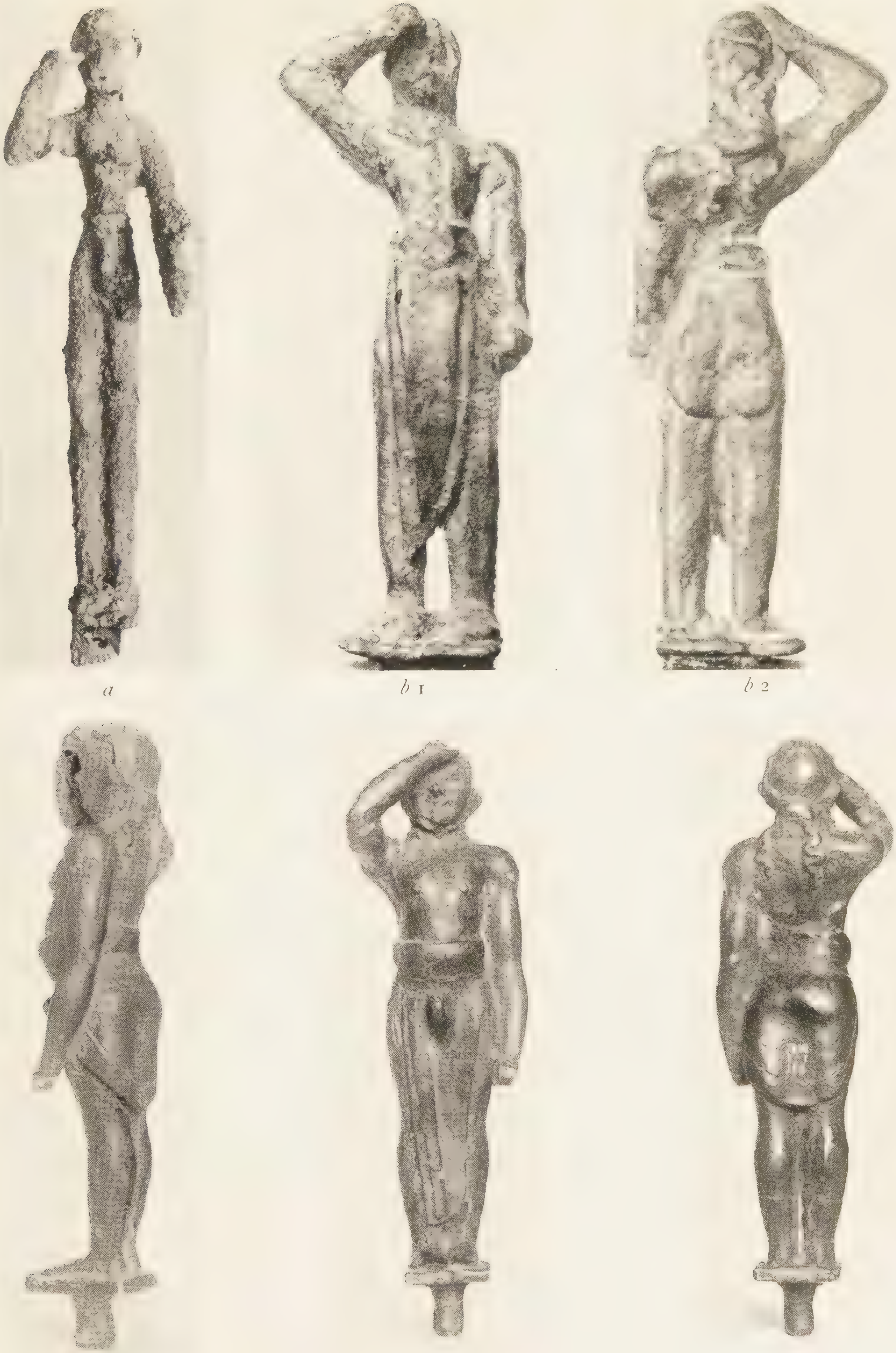
A. PLAITED LOCKS OF SPHINX IN STEATITE: MYCENAE ($\frac{2}{3}$).
(See p. 422.)



B. IVORY FIGURINES OF BOYS: PALAIKASTRO ($\frac{1}{1}$).
(See p. 446.)


a.1
a.2
b
c
d
e.1.2
f.1.2.

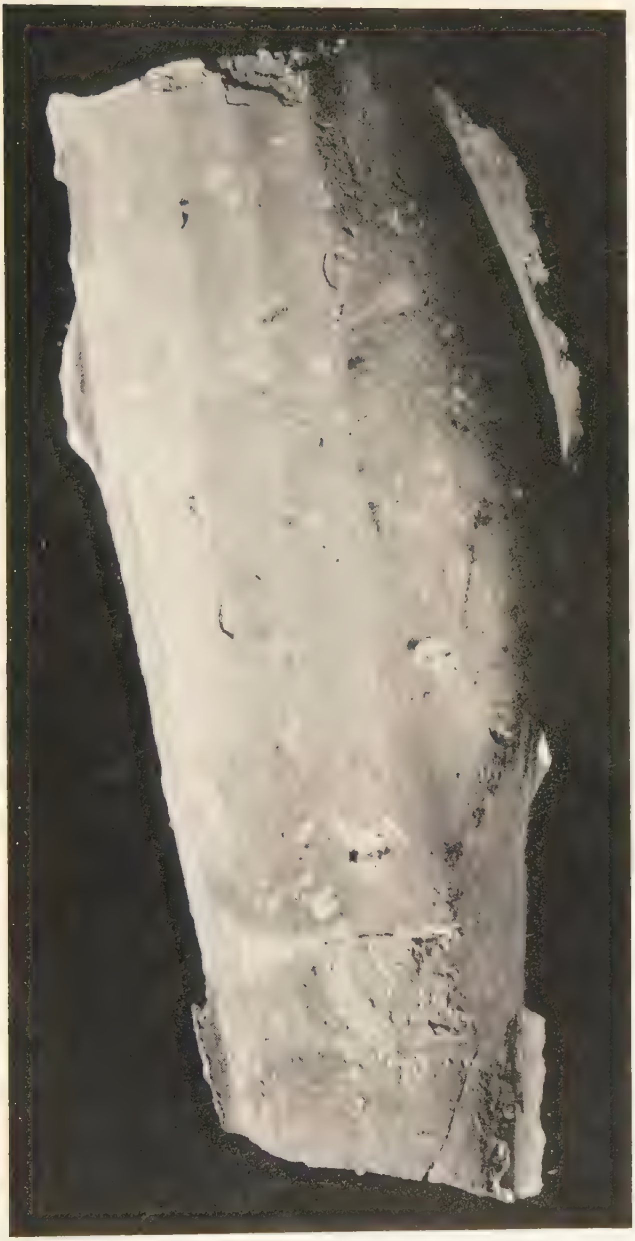
Head, Forearms, and Legs of Figurines from 'Deposit of Ivories'. (See p. 428 seqq.)



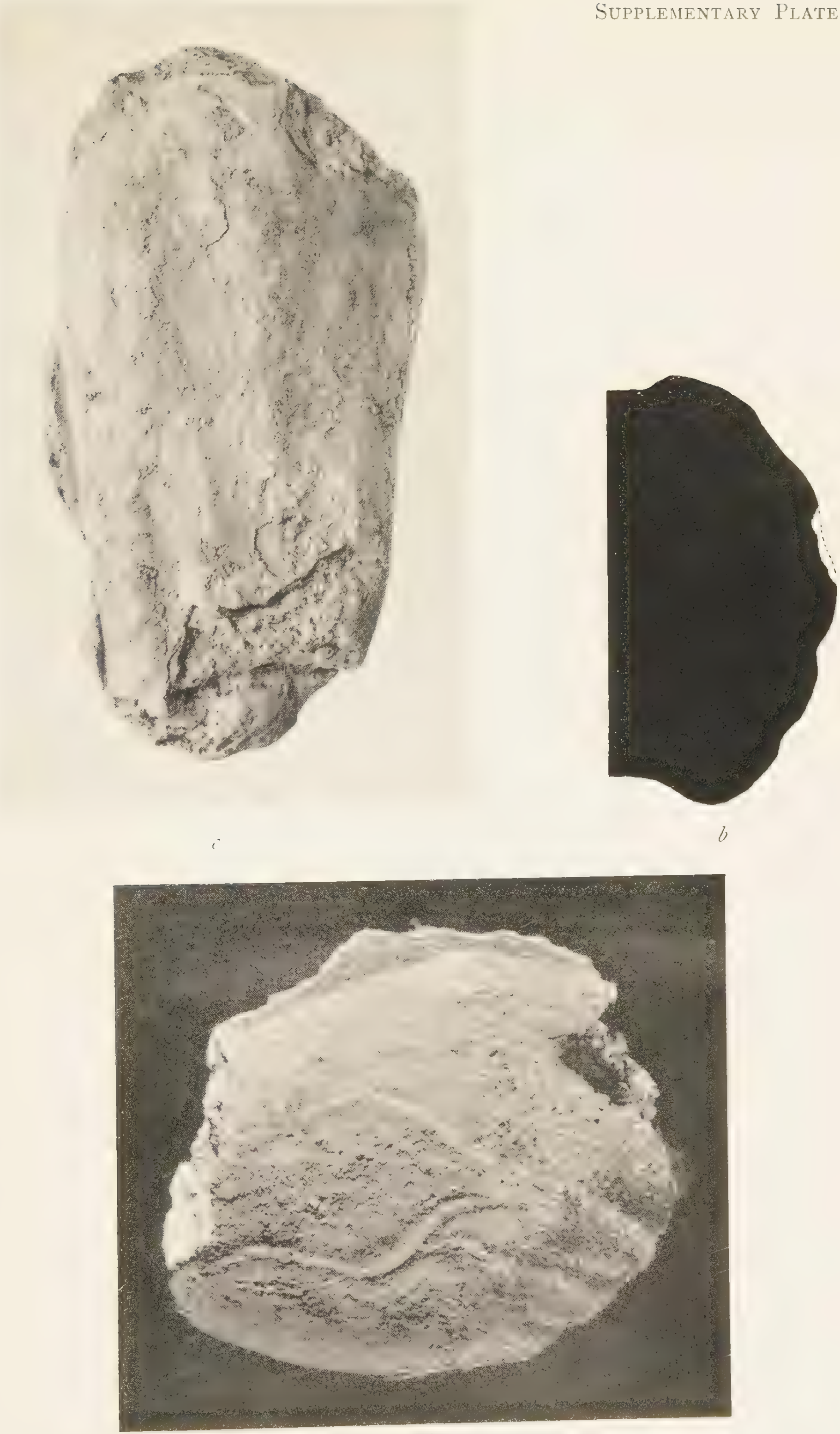
a *b* 1 *b* 2

c 1 *c* 2 *c* 3

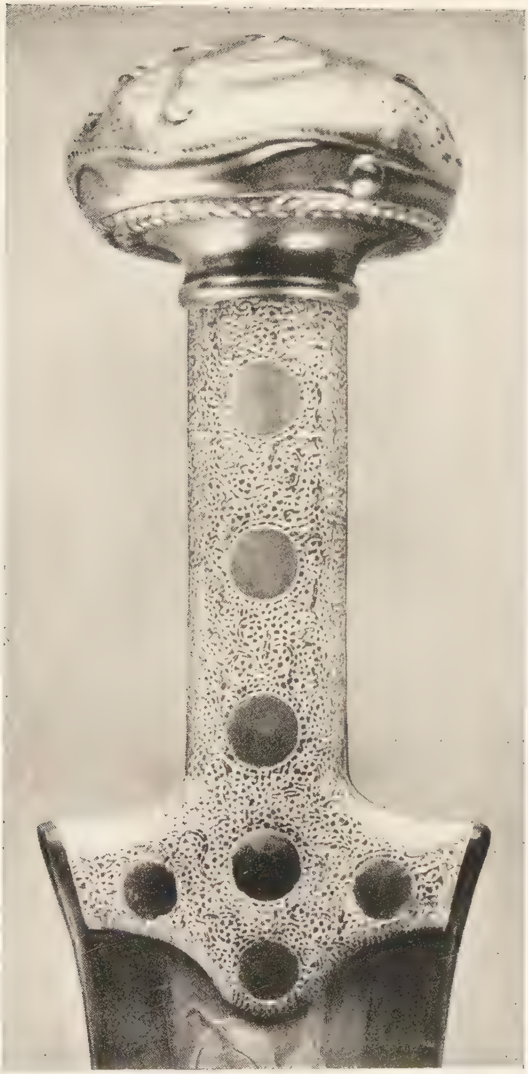
BRONZE VOTIVE FIGURES OF ADORANTS. (*a*) FROM SOUTH PROPYLAEUM, KNOSSOS; (*b* 1, 2) VOTIVE CAVE, PSYCHRO; (*c* 1 2, 3) CRETE: IN THE BRITISH MUSEUM. (See p. 459 seqq. and p. 461.)



PAINTED STUCCO RELIEF OF LOWER PART OF MAN'S LEG ($\frac{2}{3}$). (See p. 508.)



PAINTED STUCCO RELIEFS. *a*, MAN'S HAND, AND *b*, SECTION ($\frac{2}{3}$) (see p. 506); *c*, UPPER PART OF GRIFFIN'S HIND LEG. (See p. 508 seqq.)



Restored Handle of Dagger-blade from Mycenae (with Inlaid Design of Lion-hunt). (See p. 119.)

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